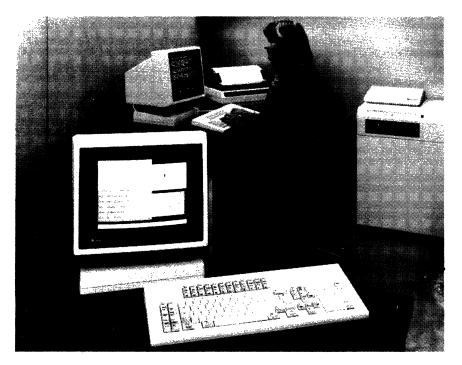
The video display terminal (VDT, or CRT, as it is commonly referred to) is the principal interface between people and computers. As the computer (particularly the microcomputer) becomes pervasive in today's business world, more and more people are being exposed to this popular business tool. Originally invented as a "glass teletype," an alternative to using a teleprinter terminal as a computer operator console, the display terminal has evolved to the point where it is a primary component in the vast majority of modern computer applications, including data entry, inquiry/response, program development, business and scientific graphics, word processing/text editing, CAD/CAM, and many others. For the purpose of this report, we will focus on alphanumeric display terminals designed for general-purpose business applications.

The steady introduction of improvements in CRT design and functional capability, such as editing, highlighting, protected fields, split-screen functions, color screens, and ergonomic housing, has contributed to the growth of the market. However, the single most important factor in today's display terminal market, in terms of how it affects both the vendor and the end user, is the continuing downward trend in pricing. Historically, price has been set in proportion to capability; dumb terminals have carried the lowest price tags, with fully featured smart editing terminals on the high-end of the price scale. While this is still true, advances in technology have caused the lines of distinction between what is dumb and what is smart to be blurred; meanwhile, prices have fallen, drastically in some cases. The classic dumb terminal, as it was known ten years ago, is now virtually extinct.

The traditional alphanumeric display terminal, threatened by the onslaught of microcomputers with terminal emulation capabilities, remains alive and well. In fact, market studies consistently show a steady, stable growth for this market in the next few years. This report focuses on non-user-programmable alphanumeric display terminals designed for general-purpose business applications. It includes a brief historical summary of the market; current market trends; developments in ergonomics; and a look at the industry's major segments. Also included are comparison columns detailing the specifications of 352 display terminal models offered by 87 vendors.

As with all segments of the hardware industry, technological improvements have led to lower prices for the user. Nowhere is this more obvious than in the display terminal market. Consider that about five years ago only the most basic dumb ASCII terminals carried a price tag below \$1,000. Today, the low-end price has fallen to below \$400, with the majority of basic smart terminals available in the \$500-to-\$1,000 range. Prices in the IBM 3270 segment of the market, traditionally much higher than in the asynchronous segment, have also fallen. Where once they sold for over \$2,000, basic 3270-type terminals can now be purchased for around \$1,000; the prices fall even lower when purchased in quantity.

These lower prices have reduced profit margins for vendors and have made competition in the terminal market tougher



The AT&T 6500 Multifunction Communication System is made up of modular controllers, terminals, personal computers, and printers; up to 32 devices can be connected in a cluster, and can communicate directly with multiple hosts using both synchronous and asynchronous protocols. Standard and multitasking displays are available.



Since Digital's introduction of the VT220 in 1983, a large market for VT220 emulating terminals has sprung up. Ampex Corporation has added the Ampex 220 to its terminal product line. Selling for \$749, the Ampex 220 provides a 14-inch display screen with 80- or 132-column display capability.

and riskier than ever. This past year saw ITT subsidiary Qume unveil its QVT 101, a smart terminal with a price tag of \$395. Many of Qume's competitors accused the company of attempting to buy market share, saying that Qume could not be making money on such a low-priced terminal. Nevertheless, within a few months, most of Qume's major competitors had also introduced a sub-\$400 unit. The problem at this end seems to be one of distribution; at such low prices, distributors are simply unwilling to carry them, given the low margins that they will bring. Still, the market remains vigorous, and new vendors continue to enter. The real winner in all of this, obviously, is the user, who continues to gain more functionality per terminal dollar.

Today, there are somewhere in the neighborhood of 10 million display terminals installed throughout the United States. However, the healthy growth of this market has been jeopardized by the popular acceptance of the microcomputer by corporations. As microcomputer prices also tumble, many firms are using them as multipurpose workstations that usurp some of the functions traditionally performed by display terminals. As microcomputer-tomainframe links improve, more and more microcomputers will be able to perform terminal tasks in addition to microcomputing tasks. Datapro has seen a drop in the number of companies entering the terminal market in the past few years, as well as a small shakeout. At the other end of the spectrum, however, lies the multiuser microcomputer, that provides another market into which the display terminal vendor can sell. The days of tremendous growth in the terminal industry would appear to be over; and, in fact, many of the established terminal vendors have experienced financial difficulties in the past year. But the display terminal will remain an important part of the computer industry for the foreseeable future.

GENERAL CATEGORIES

All of the terminals covered in this report have three features in common: 1) each has a keyboard that can

generate, and a monitor that can display, a full alphanumeric character/code set; 2) each has the capability to send and receive data via communications lines to a remote host computer; and 3) each is marketed for general-purpose use in the United States and Canada, and is identified as a distinct product to end users.

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User-programmable (or intelligent) terminals feature software support. The vendor typically provides an operating system, an assembler- or compiler-driven programming language, subroutines, I/O utilities, one or more protocol emulators, and one or two application programs, such as data entry and text editing.

These categories have been squeezed from both sides, however. At the high end, user-programmable terminals have all but given way to microcomputers; very few companies continue to manufacture these high-priced terminals. At the low end, advances in technology and plunging prices have led to the extinction of the dumb terminal as such. Today, virtually all display terminals on the market fall into the smart terminal category.

MICROPROCESSOR CONTROL

All display terminals currently manufactured are microprocessor-controlled. Microprocessor-based programs (firmware) reside in ROM or PROM memory. ROMresident programs, which are inexpensive when reproduced in large quantities, control those features which are permanent and unchangeable; while PROM-resident programs are typically produced in smaller quantities and implement customized or modifiable features. Either type can be replaced by simply removing the old chip and putting in a new one. This flexibility is highly beneficial to the manufacturer, since older equipment can be updated and nonstandard customer specifications can be fulfilled without costly hardware changes. Theoretically, program interchangeability might also benefit the user, but in practice it is doubtful that the requirements of a particular user will change often enough to make it a great advantage. The fact that PROM replacement generally must be done at the factory or by a field service technician precludes frequent PROM replacement.

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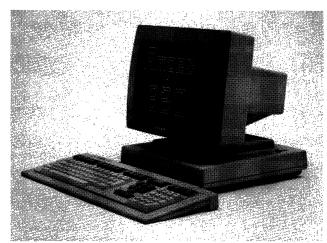
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board and displayed on the screen, implement special features, set control parameters, etc. Firmware specifications are generally determined at the time of order, and once the firmware is in place, execution is transparent to the user. Some vendors have predetermined programs from which to choose; a few permit users to submit their own firmware specifications.

DISPLAY MEDIA

The vast majority of display terminals manufactured today use a cathode ray tube (CRT) as the display medium. The popularity of this device stems from its flexibility, high capacity of characters, and relatively low cost.

In addition to being able to display alphabetic and numeric characters in virtually any format, the CRT can highlight characters by means of underscoring, reverse video, blinking, or varying levels of brightness. Some CRT terminals can display double-size characters. Today, more and more CRT terminals have a graphics character set for creating forms and report formats on the screen. Some CRTs also permit the creation of business graphics—for example, bar, column, and pie charts reflecting sales, income and expense, inventory levels, etc. Interactive graphics or engineering graphics, on the other hand, is a completely different discipline which requires a high-resolution graphics terminal. Graphics terminals can also display alphanumeric characters, but they are considerably more expensive. Graphics terminals which are used primarily for scientific or laboratory applications are not included in this report.

Other types of alphanumeric displays have existed for years, and at one time were thought to be a serious challenge to the CRT. Examples of these are LEDs (light-emitting diodes), which are very popular in calculators and point-of-sale (POS) terminals, and gas-discharge displays such as IBM's 3290. In fact, there is quite a bit of research and development going on concerning flat screen, plasma displays; many industry observers expect these new displays to become a factor in this market very shortly. The chief advantages of these alternate types of displays are that they provide extremely sharp images, and are more compact than the traditional CRT. However, as of this time, they remain quite expensive, and have found only a small niche in certain specialty applications.

ERGONOMICS

According to the American National Standard ANSI 294.1-1972, *ergonomics* is defined as "a multidisciplinary activity dealing with the interactions between workers and their total working environment, plus such traditional and environmental aspects as atmosphere, heat, light, and sound, as well as of tools and equipment of the workplace."

Display terminal manufacturers have become increasingly aware of the need to consider human factors, or ergonomics, in the design of their equipment. The trend toward making CRTs more "operator-friendly" began in Europe, particularly in the Scandinavian countries, where powerful unions representing clerical workers have implemented

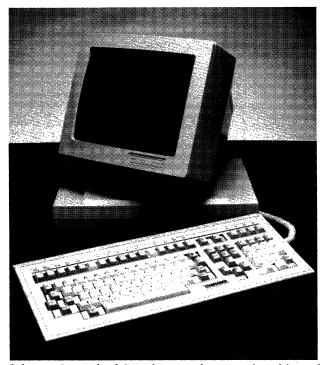
rigid guidelines as to what types of display terminals their members will use.

While no such guidelines are currently in effect in the United States, virtually all CRT manufacturers have recognized market opportunities in ergonomic designs, and are attempting to attract customers through marketing campaigns emphasizing the human factors that influenced the design of their terminals.

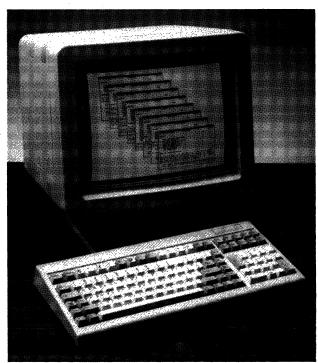
The average operator of a display terminal is concerned primarily with two components with which he or she has the most interaction; the keyboard, for input of data, and the display screen, for verifying what was keyed and for reading the output data. Ergonomic design improvements are therefore concentrated on these two components.

Virtually all display terminal vendors now offer keyboards that are detached or detachable. Connected to the display console via a cable or coiled wire, these keyboards may be placed at some distance (usually 3 to 6 feet) from the console, allowing the operator to place the keyboard in the most comfortable position(s) while working at the terminal.

The layout of the keyboard is also a concern. Most keyboards feature a typewriter-style layout, for ease of training personnel already familiar with a typewriter's key arrangement. Dedicated (separate) numeric keypads are also generally available for applications requiring fast numeric entry; these duplicate the key arrangement of a pocket calculator or adding machine. In addition, some vendors



Cybernex Limited, of Canada, manufactures a broad line of display terminals offering emulation of several popular terminal models. Vendors whose terminals Cybernex emulates include Burroughs, Data General, Digital Equipment, Hewlett-Packard, Honeywell, and IBM.



Ann Arbor Terminals recently introduced the VXL display terminal. The VXL provides display screen capacities ranging from 36 lines by 80 columns up to 60 lines by 160 columns. The VXL can connect to multiple hosts, and offers a multiwindow

have added a palm rest for the numeric pad, for operator comfort. Many vendors also offer sculptured key caps in place of flat key caps, to facilitate speed of data entry and improve operator comfort. For keyboard feedback, vendors may offer either audible or tactile (touch-sensitive) key click, which tells the operator that the key has been depressed far enough to register.

Another important design factor to be considered is the slope and thickness of the keyboard assembly itself. Most keyboards manufactured today are either sloped or stepped, and the optimum profile angle generally is believed to be between 5 and 15 degrees. It has also been determined through studies that the thickness of the keyboard, or the distance from the base of the keyboard to the home row of keys, generally should not exceed 30 mm. The vast majority of keyboards manufactured today have a lowprofile design that conforms to the German DIN (Deutsches Institute fur Normen) standard for ergonomics.

Operator eyestrain or fatigue is a consideration which must be dealt with when designing a CRT display screen. Most display screens produced today are etched or contain a bonded faceplate to reduce glare. A few companies are now offering display screens that are flat, instead of curved at the edges. These flat displays provide a more uniform display over the entire screen, particularly around the edges. A method of glare reduction found to be the most popular among manufacturers is the addition of tilt and/or swivel adjustments. These adjustments not only allow the operator to place the viewing area in a position to avoid

glare, but also to place the screen at the most comfortable viewing angle.

The phosphor color and size of characters also contributes to their legibility. Green phosphor has replaced white as the standard for the majority of display terminal models. Amber phosphors are now very popular in Europe, and many domestic vendors now offer amber phosphor characters in this country. However, there is currently no scientific proof that one phosphor color is easier on the eyes than another. Character phosphor remains a matter of personal preference. The vast majority of display terminals on the market today utilize the dot matrix technique to form characters. The more dots that are contained in the character cell, the sharper the character will appear. For years, 5-by-7 characters were the standard of the industry; today, 7-by-7 and 7by-9 characters are more common, and they provide a clearer character. Some vendors have incorporated higher refresh rates to reduce image instability, or flicker, in the characters, which further improves their legibility.

The size of the characters generated depends on the size of the screen and the display format used. Characters will be larger on 15-inch (diagonally measured) screens than on 12inch screens; likewise, characters will be larger in an 80 character-per-line format than in a 132 character-per-line format. For applications requiring a 132-column format, a 14- or 15-inch display screen is preferable.

The most recent trend in terminal ergonomics is toward reduced size. Today's display terminals provide a reduced "footprint" size, that takes up less desk space.

Individually, these improvements may be slight, but when considered cumulatively, they represent a marked improvement over the terminals of five years ago.

All of the above features merit serious consideration by potential terminal buyers. Although many ergonomic features may be ordered from the terminal manufacturer, the increased emphasis on ergonomics has led to the springing up of a number of specialty companies that offer devices that can be added to terminals to make them more userfriendly. Several companies market optical display filters, glare shields, noise shields, etc., which are designed to fit most major displays. Modular office furniture manufacturers also offer work stations that provide tilt/swivel bases for terminals not equipped with these features.

As user awareness of human factors grows, we see ergonomic considerations in the U.S. becoming not simply a market opportunity, but a mandate. Controversy continues to grow regarding the effects that constant use of a CRT has on the health of the operator. Workers whose jobs require them to sit at the display all day have complained of headaches, dizziness, back pains, and nausea. The National Institute for Occupational Safety and Health (NIOSH) has conducted research studies on this subject (copies of these reports can be obtained from NIOSH). While no definite conclusions have as yet resulted from these studies, it is clear that these concerns are a significant matter that must

TABLE 1. IBM 3270 COMPATIBILITY

Vendor	System/Model	IBM Controllers Emulated	IBM Displays Emulated	Personal Computing Capability
AT&T	6500		3178/3179	Yes
AT&T	E4540	3274/3276	3278/3178/3279	No
Beehive	ATL-3270/ATL-3270MS	3276	3275/3276	No
Braegen	8500 (ELAN)	3274	3278/3180	Yes
Carterfone	7276	3276	3276	No
Computer Communications	Group 8000	3274	3276/3278	No
Comterm	5270/6270	3274	3278/3178	No
Control Concepts	EM-3275/3276/ CC-3275/3278	-	3275/3276/3278	No
Datastream	8178/8180	3274/3276	3178/3180	No
Davox	1911/2911	3274	3278	Yes
Harris	Challenger	3274	3178/3180/3179	Yes
lcot	700/701	1	3278	No
Informer	370	3276	3276/3278	No
CIE Systems	CIE-7800/7850		3178/3278	Yes
ITT Courier	9000	3274/3276	3178/3278/3179/3279	Yes
Lee Data	Series 300/400	3274	3178/3278/3279/3180	Yes
Memorex	207X	3274/3276	3178/3278/3279/3180	Yes
NCR	7950	3274	3278	No
Nixdorf	8270	3274	3278	No
Paradyne	PDS 270	-	3276/3278	Yes
PHAZE Information Machines	P3278/P3279/P9020	l —	3278/3178/3279/3179	Yes
Term-Tronics	3270X	1-	3275/3276/3278	No
Term-Tronics	Miracle 178/179	l —	3178/3278/3179	No
Telex	TC 270	3274/3276	3276/3178//3278/3179/3279/3180	Yes

be addressed by both vendors and buyers. As of this time, they are being addressed out of concern for market share in a highly competitive market. It is expected, however, that domestic unions will follow the lead of European unions and place standards for VDT use in future contracts. Ergonomic features will then be mandatory.

MAJOR DISPLAY MARKETS

The alphanumeric display terminal market generally is acknowledged to contain two major segments: the ASCII (asynchronous) terminal market, and the IBM 3270 (synchronous) terminal replacement market. Both segments continue to enjoy healthy growth, particularly the ASCII market. And, as mentioned previously, low prices and increased price/performance have made display terminals more attractive than ever to potential users, and continue to play a major role in the direction of each of these segments.

IBM's Best-seller, the 3270

The IBM 3270 has strongly impacted the alphanumeric display terminal market since deliveries began late in 1971. The first generation of devices, which were discontinued as IBM products in late 1982, included the 3271/3272 control units, 3275 display station, 3277 display, and 3284/3286/3288 printers. In 1977, the product line was radically overhauled, resulting in the announcement of a second generation of components (the 3274 control unit, 3276 control/display, 3278 display, and 3287/3289 printers) that offered increased capabilities at prices much lower than comparable older models. Along with that announcement came major price reductions on the older equipment. In late 1979, color displays and printers were added to the family.

In March 1983, IBM made some long-awaited changes and enhancements to the 3270 product line. Unveiled were the 3178 Display Station, a smaller and less expensive version of the popular 3278 Model 2 display; new versions of the 3274 Control Unit, offering improved price/performance: the 3290 Information Panel, a gas plasma display; the 3299 Terminal Multiplexer, a coaxial cable eliminator; price reductions of approximately 10 percent on older existing 3270 models; purchase discounts of 40 percent on the 3178 for quantities of 3,000 or more, with the conversion of leased 3278s applying to that quantity; and an option permitting the attachment of the IBM Personal Computer to the 3278 Display Station. These announcements were followed in October with the introduction of the 3270 Personal Computer, a version of the firm's PC for use as part of a 3270 cluster. The 3179 color display and 3180 display, both compact terminals along the same line as the 3178, were unveiled in March 1984.

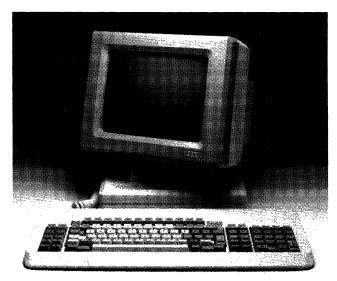
These changes were made by IBM to protect their large (and lucrative) 3270 installed base. This installed base numbers well over 1½ million units. The independent 3270-compatible terminal vendors, through lower prices or improved price/performance, were seriously eroding IBM's share of the market. These independents include vendors such as ITT Courier, Telex, AT&T, Lee Data, Memorex, and several others. In order to remain competitive, these vendors were forced to reply to the IBM announcements with new products and/or price reductions of their own. Some could not, and a small shakeout occurred, with Raytheon Data Systems (once IBM's number-one competitor in this market) and MDS Trivex exiting the market.

By adding the 3270-PC, as well as Personal Computer attachability, to the 3270 system, IBM has addressed a

➤ threat which is as much internal as it is competitive. The overwhelming acceptance and popularity of the IBM Personal Computer poses a real threat to the entire display terminal industry. As personal computing becomes the rule, and not the exception, in most major corporations, IBM is moving to protect its huge 3270 installed base by incorporating personal computing into the 3270 system. Most of the independents now offer some type of personal computing with their product lines, either via their own equipment or through IBM Personal Computer attachability. In the near future, some type of personal computing capability is likely to become requisite for competing in this market.

With the increased pressure from IBM, it is now more important than ever for the independent vendors to offer a complete line of 3270-compatible products. Today's successful independents must couple a full range of products with lower prices, improved price/performance, and added value, in order to create an opportunity to penetrate an IBM shop. International Data Corporation, a market research firm located in Framingham, Massachusetts, estimated the installed base of IBM 3270 and plug-compatible terminals to be nearly 3 million units at the end of 1984, with IBM holding nearly a 60 percent share. Clearly, even a small percentage of this market can be extremely profitable for an independent vendor.

In addition to the 3270-compatible vendors, some ASCII terminal vendors have invaded the 3270 market through protocol conversion. On a 3270 network, synchronous terminals can be replaced with asynchronous terminals coupled with protocol converters. These devices allow the ASCII terminal to support the functional characteristics of the 3270 terminal. The advantages of this strategy are twofold—ASCII terminals remain less expensive than their 3270 counterparts, and users with both IBM and non-IBM hosts may utilize the same terminals to access each.



ITT Courier now offers a line of compact terminals that are plug-compatible with the IBM 3270 family of terminals. The ITT 1778, an alternative to the IBM 3178, can attach directly to IBM 3274 and 3276 controller ports.

What is in store next for the venerable 3270 family? Most industry observers predict that IBM's next step will be the introduction of a new generation of 3274 control units, which will integrate new functions into the unit. Some of these functions may be the attachability of personal computers and/or ASCII terminals, with switch-selectability between the 3270 and ASCII environments.

Table 1 provides a summary of the major 3270-compatible vendors and their products. This table does not include those products that require a protocol converter for 3270 emulation.

The ASCII Terminal Market

The ASCII display terminal market is the largest segment of the two major display markets, with regard to number of vendors, number of units marketed, and quantity sold. This market originated as the Teletype replacement market, with units intended to replace the highly popular Teletype ASR 33/35 terminals. Although today not many of the ASCII terminals purchased are actually replacing the older Teletype units, the ASCII terminal market is still often referred to as the teletype-compatible market.

Manufacturers of ASCII terminals generally aim their products at educational and commercial users who require large numbers of low-priced terminals for applications such as order entry and time-sharing.

As was mentioned earlier in this report, price is a key factor for success in this market. The continuing price war involving the low-end entries in the ASCII terminal market has made the recent activity in this segment even greater than in the past. Initially, only the truly "dumb" terminals (like the original dumb unit, the Lear Siegler ADM 3) were available for less than \$1,000. Now, features such as block mode transmission and editing capabilities are available at below traditional dumb terminal prices. In addition to price cutting, vendors are attempting to make their offerings more attractive to potential buyers by adding enhanced features such as business graphics, split-screen or windowing capabilities, and a variety of visual attributes. ASCII terminal vendors are also paying a lot of attention to ergonomics, incorporating features such as tilt/swivel screens and low-profile keyboards into their products.

Leaders in the ASCII field generally provide a full range of terminal models ranging from low-end units to editing models. The current leaders include Wyse Technology, TeleVideo Systems, Applied Digital Data Systems (ADDS), Esprit Systems, Lear Siegler, and ITT Qume. An active but somewhat separate subsection of the ASCII terminal market consists of the Digital Equipment Corporation VT100, its successor, the VT220, and those terminals that offer Digital emulation. A large number of vendors are involved in the Digital Equipment Corporation emulation market, including those general-purpose terminal vendors mentioned above; in fact, most major ASCII terminal manufacturers provide at least one Digital emulator in their product line.

As a by-product of Digital emulation, vendors are now providing ANSI X3.64 code compatibility on their terminals. The American National Standards Institute (ANSI) first published the X3.64 standard for two-dimensional data devices in 1977. The goal of the standard was to standardize control codes for all terminals. The Digital VT100 was the first display terminal to conform to the ANSI standard, and the VT220 also conforms. In order to provide true Digital emulation, the makers of Digital emulators also are required to provide ANSI X3.64 code compatibility on their products.

In addition to Digital, most of the major mainframe and minicomputer vendors offer terminal product lines for use with their computer systems. Hewlett-Packard claims a large installed base of display terminals, as do Burroughs, Data General, and Sperry.

DISPLAY TERMINAL CHARACTERISTICS

The accompanying comparison charts summarize the characteristics of 352 commercially available alphanumeric display terminals from 87 vendors. Nearly all of the information was supplied by the manufacturers during November and December 1985. Their cooperation is acknowledged and greatly appreciated.

Datapro sent repeated requests for information to over 100 companies known or believed to be in the display terminal business. The usable responses summarized in our charts provide a comprehensive picture of the commercial display terminals that are currently available in the United States and Canada. The absence of any specific company from our charts means that the company either failed to respond to our repeated information requests or was unknown to us.

The chart entries and their significance are explained in the following paragraphs.

TERMINAL DESCRIPTION

Display terminals are available in one of two basic terminal configurations: stand-alone and cluster. Stand-alone units are typically those that contain all components that support the operation of the terminal including display, keyboard, interface, and power supply within a single cabinet. Auxiliary units such as printers, cassette tape drives, etc., are usually external devices. Sometimes a stand-alone unit includes separate cabinets for terminal control and keyboard/display sections, and it may even include one or two separate displays. A cluster configuration typically includes a terminal control unit and a number of individual cableconnected keyboard/display units that can be located several thousand feet from the controller. In some cases, the vendor provides a multiplexer that accommodates a cluster of stand-alone terminals. The size of a cluster arrangement is defined by the maximum number of displays per controller.

Terminals that are designed to be hand-held or to be hand-carried are noted in the entry *transportability*.

Some terminals are designed as direct replacements for other terminals. In the alphanumeric display terminal market, replacement terminals fall into two principal categories: those designed to replace an IBM family terminal are indicated as having IBM compatibility; and those designed to replace a terminal in the ASCII/Teletype market are indicated as having teletype compatibility.

Some vendors provide other compatibility, and can replace terminals such as those produced by Burroughs, Digital Equipment, Honeywell, and Sperry. For example, a wide variety of vendors market terminals that are compatible with the Digital VT100 or newer VT220.

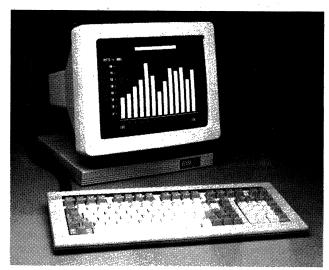
Either of two types of compatibility may be offered: transmission compatibility or "plug-to-plug" compatibility. Transmission compatibility requirements include identical protocol, code and unit code structure, timing, asynchronous or synchronous operation, and transmission speed. Some vendors even provide identical cables, which is a cost-effective consideration in a local cluster environment. Most vendors with transmission-compatible units offer additional features and functions that the original vendor's equipment does not have, implemented via minor changes in host software. Units with true plug-to-plug compatibility not only have identical transmission parameters, but also identical features and functions; no alteration to host software is necessary, but no enhancements beyond the original vendor's equipment are available.

DISPLAY PARAMETERS

Information displayed on the screen of a CRT is generally arranged according to an orderly format consisting of a maximum number of printed lines per screen and characters per line. The electronic circuitry that produces the display image is designed to a specified set of parameters that define the *display capacity* (i.e., the maximum number of display positions) and the *screen arrangement* (i.e., the maximum number of displayable lines and displayable characters per line). The most common display capacity is 1920 characters arranged in 24 lines of 80 characters. Many vendors offer 132-character display lines, which can eliminate the need to revise or patch software designed for standard 132-column printers or to maintain dual sets of programs for 80-column and 132-column output.

In most terminals, the number of characters that can be stored by the terminal's display memory equals the maximum screen capacity. In some terminals, however, storage is provided for more characters than can be displayed on the screen at one time. This additional data may be stored character-by-character, by the line, or by the "page" (a full screen of data). *Memory capacity* defines the total number of characters, lines, and pages that can be stored in the terminal's display memory.

Information is displayed in a rectangular area, slightly smaller than the total surface of the display screen. The factors that determine the required size of the *screen area* are the display arrangement and the size of the displayable



Since its first terminal shipments in 1982, Wyse Technology has risen to the leadership position in the ASCII display terminal market. The company now boasts an installed base of over 250,000 terminals. The WY-50+ is an enhanced version of the WY-50, Wyse's most successful terminal model.

characters. For example, the typical 1920-character display utilizes a 12- or 15-inch (diagonal) screen area.

Ergonomic factors are becoming increasingly important as terminal features. One such feature gaining in popularity is a *tilt and/or swivel screen*. This feature provides for the mounting of the display monitor onto a separate desktop base or pedestal, and allows the operator to twist the screen vertically ("tilt") and/or horizontally ("swivel") to the most advantageous position for viewing.

The set of total displayable symbols and the method of symbol formation are functions of the character generator, which accepts coded characters (typically ASCII or EBCDIC) from the computer and keyboard and converts them to a number of dots or strokes so that the form of the symbol or image can be displayed. In CRTs, characters are formed almost exclusively by the dot matrix technique. Each character is formed within a matrix of dots, and only those dots required to form the specific character are intensified. For example, a dot matrix that contains 35 dots is typically arranged 7 dots high by 5 dots wide.

Characters can be made clearer by increasing the number of dots within the matrix. The stroke technique forms characters by drawing short straight lines between specified points. Character phosphor refers to the physical coating of phosphorous on the back side of the screen which, when illuminated, creates the displayed characters. The type of phosphor used defines the color of the displayed character, as well as the persistence of the phosphor (a long-persistence phosphor is less likely to cause image flicker problems than a short-persistence phosphor; however, the image of a long-persistence phosphor is more likely to smear when lines are scrolled). Among the more common phosphors available are P4 (white), and P31 or P39 (green). Amber and yellow-green phosphors are also available on some terminals.

Display arrangement, display medium, character phosphor, and symbol formation all have a great impact on display clarity. Several units should be tested to decide which is easiest on the operator's eyes.

Attention can be drawn to vital information and different types of significant data can be visually separated by the use of the following display features:

- Color—characters or fields can be separated by color, which also can be used to identify conditions or types of data. IBM's color display, the 3279, is currently emulated by many of the independent 3270-compatible vendors.
- Graphics—bar charts, pie charts, and graphs may be used
 to present certain types of information. In most cases, an
 affirmative answer in this category indicates the presence
 of line drawing or special graphics character sets. It
 generally does not indicate the presence of highly sophisticated graphics capabilities found on graphics-dedicated
 terminals.
- *Underline*—highlights significant information by underlining.
- *Blink*—highlights significant information by causing it to blink off and on.
- Blank (security)—sensitive information is transmitted, but not shown on the screen.
- Bold—highlights significant information by displaying it at a different brightness level.
- Reverse—highlights significant information by displaying a negative image of it, e.g., when normal data is displayed in white on a dark background, the highlighted character or field is displayed in dark on a white background.
- Double size—highlights significant information by displaying it in characters which are of larger size than normal. Double height, double width, and/or double height/width characters may be supported.

Some terminals offer several of these display features, which can be combined to produce even more effective results. The features are programmable (usually via the keyboard), and can be used on a character-by-character basis, or in a designated field.

Some applications require viewing more data than can be displayed at one time. The following features satisfy this need:

• Scroll—this feature moves all displayed lines of data up or down by one line as a new line is added and an existing one removed. In some cases, the first line is linked with the last so that the data is rolled but not lost. In others, data is lost as it rolls off the screen. This feature permits the user to scan through a volume of data to locate key information.

- Many vendors now feature smooth scrolling, in which data is rolled or scrolled smoothly up or down (much the same as the credits at the end of a movie).
 - Paging—this feature defines and stores two or more discrete frames or pages of data and displays any selected page.

Although scroll and paging features can be software implemented in the host computer, the comparison chart entry applies only to those terminals that implement the feature via hardware or firmware. Many terminals provide the scroll feature, but relatively few provide paging. Some provide both features.

The cursor marks the position on the screen where the next character will be read or written from memory. Cursor controls enable the operator to maneuver the cursor on the screen and facilitate the input and output of data. Different manufacturers use a variety of symbols to indicate the cursor position on the screen, for example, an underline, a reverse video block, or a blinking character. Some terminals allow the operator to choose among several types of cursor symbols; the most typical feature being selectable blinking cursor. Some terminals also have addressable/readable cursors that enable the position of the cursor to be written or read by the host computer under program control.

Most businesses use printed forms for daily activities such as billing, ordering, payroll, etc. Some CRT terminals can duplicate the printed form on the face of the screen, and data can be keyed into the blank spaces just as the typist enters data into a printed form. This "fill-in-the-blanks" approach to data entry requires a protected format capability. Display terminals that incorporate this feature treat the fixed format differently than they treat keyed data. Field identifiers such as "name" or "salesperson number" are protected from inadvertent key entry, and data entry is confined to the variable fields (blank spaces) following the field identifiers.

After having completed entry into the fixed format, the operator transmits the data to the central computer. A feature called *partial screen transmit* promotes line economies by transmitting only the keyed data; the fixed format remains displayed and the "blanks" are erased for the next entry. This feature is also useful for transmitting only a portion of the displayed data such as a field, line, or block.

A few vendors now offer a *split-screen* and/or "windows" feature on their terminals, in which the display screen can be divided or partitioned into a number of separate workspaces. Data in these workspaces can be manipulated (e.g., scrolled, stored, or transmitted) independently of the rest of the screen. *Tabulation* capabilities allow some terminals to automatically move the cursor to the beginning of the next line, or to the beginning of the next variable field within a line of formatted data immediately following the entry of the character that completes the end of the current line or field. The tab key needs to be used only when the current line/field is to remain partially filled.



Volker-Craig is another company now offering a Digital VT220 emulator. The VC5220 sells for \$795, and offers a 14-inch green or amber display with 80/132-column display capability.

Editing features in a display terminal can consist of any combination of the functions listed below, although the best terminal for editing purposes would include all of them. Each function is performed with respect to the current position of the cursor. The desirable editing functions are:

- Character insert—the capability to insert a character into an existing line of displayed text; the remaining characters shift to the right or "spread" to accommodate the added character. The spreading capability may terminate at the last character position of the line or at the last displayable position on the screen. Data is lost when it is spread beyond the termination point.
- Character delete—the capability to delete a character from an existing line of displayed text; the remaining text closes up when the character is deleted.
- Line insert—the capability to insert a line of text into existing text; the text spreads to accommodate the added line.
- Line delete—the capability to delete a line of text from existing text; the remaining text closes up when the line is deleted.
- Erase—the capability to erase a character, line of text, message, field, or the complete screen. Most terminals include character erase and some form of display erase, which may erase the entire contents of the display, just that portion following the cursor location, or a combination of both functions. Line erase is optional in many terminals.

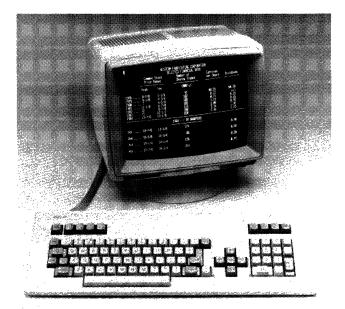
> KEYBOARD PARAMETERS

Keyboard *style* defines the general arrangement of keys; e.g., typewriter- or data entry (keypunch)-style. Data entry keyboards have a numeric keypad embedded in the alphabetic part of the keyboard which is accessed via numeric shift. The *character/code set* refers to the set of symbols that appear on the keytops and, in many cases, to the actual character codes generated for each key depression, such as ASCII, EBCDIC, APL, etc. Some terminals are available with more than one keyboard style to satisfy particular user needs.

Keyboards that can either fit flush against the display or be located some distance away via cable connection are referred to as *detachable* keyboards. This feature provides increased configuration flexibility and operator convenience.

Some terminals are available with program function keys. These are special keys whose character codes are interpreted by the user's program. A function key is used to reduce the number of required input keystrokes to save time and reduce the number of input errors. Depressing one key could instruct the system to "sell one seat" or "call Chart A," for example.

A numeric keypad is a special keyboard feature that includes a set or block of 10 numeric keys, usually located to the right of the main keygroup. These numeric keys are arranged in an adding-machine format and are particularly useful for applications that require a high volume of numeric entries or arithmetic calculations.



Lear Siegler's response to ITT Qume's \$395 QVT-101 is the ADM 3E, selling for \$399. The ADM 3E provides a 14-inch display screen, a low-profile keyboard, a wide range of smart terminal features, and emulation of the Lear Siegler ADM 3A, the original "dumb" terminal.

ANCILLARY DEVICES

External I/O devices can add considerable flexibility to the applications possibilities for display terminals. Many vendors provide *serial printers* or *line printers* for use with their terminal families. In the case of IBM 3270-type terminals, these devices usually connect to the control unit, not to the display terminal itself.

Composite video output allows the terminal to drive an auxiliary monitor. This capability is useful in applications such as computer-aided instruction, where there is a need to display the screen image to a group of people.

Other devices supplied and supported by the terminal vendor, such as diskette drives, cassette tape drives, light pens, magnetic stripe (ID card) readers, bar code readers, etc. are also listed. Even if they supply no auxiliary devices themselves, most vendors supply a *port* through which another vendor's printer or other device may be attached to the display.

TRANSMISSION PARAMETERS

Nearly every display terminal contains a communications interface that enables communications between the terminal and the central computer site. *Mode* and *technique* define the operating mode and the method in which data is transmitted. There are two operating modes: half-duplex (transmission in both directions, but not simultaneously), and full-duplex (simultaneous transmission in both directions).

Data is transmitted synchronously or asynchronously. Asynchronous transmission is characterized by the transmission of data in irregular spurts, where the duration of time can vary between successive transmitted characters; the transmission from an unbuffered teletypewriter is a good example. Synchronous transmission implies the transmission of data in a steady stream. The time interval between successive characters is always precisely the same. The communications interface either provides clocking or accepts external clocking signals from the data set.

Communications protocol refers to the type of line discipline (control code sequence and control characters) that the terminal employs. The three most commonly used protocols are ASCII, IBM's Binary Synchronous Communications (BSC) technique, and IBM's Synchronous Data Link Control (SDLC) line discipline. Other large mainframe vendors such as Burroughs, Honeywell, and Digital Equipment Corporation have produced their own communications protocols. Many display terminals now also conform to the ANSI X3.64 standard for control codes; if ANSI standard conformity exists, it will be indicated here.

The transmission *code* refers to the bit pattern of the transmitted characters. Two codes are prominent: EBCDIC and ASCII. The latter has been accepted as an industry and government standard, and is now the most commonly used code by display terminals. EBCDIC is most commonly used with IBM equipment and its replacements.

The CRT terminal is a high-speed device that is usually capable of transmitting and receiving several thousand characters per second; however, it must run at a speed that is compatible with the communications system in which it is used. Most terminals are used on voice-grade facilities, which limit the transmission *speed* to a practical maximum of 4800 bits per second over the dial network and 9600 bits per second over leased or private lines.

Message format refers to the way data is transmitted (e.g., by block, by line, or by character). Terminals that are designed to be transmission-compatible with a teletype unit transmit a character for each key depression. Buffered terminals transmit data in multicharacter blocks. The line or block mode permits data to be composed and edited prior to each transmission and generally permits more efficient utilization of the communications facility. Some terminals offer manual selection between the modes.

Multipoint operation characterizes terminals that are capable of operating in a multiple-terminals-per-line environment such as that employed by the IBM 3270 display terminals. Basic to implementing this capability is the ability of a terminal to distinguish a control message intended for it alone. Polling invites the terminals to send data. Addressing informs the terminal that a message from the central computer is coming, so that it will be conditioned to receive. Central control of the message traffic is maintained by the central computer.

Display terminals usually have a *terminal interface* that meets the standards of the EIA RS-232-C specification or the 20 ma current loop, and connects to an external modem or acoustic telephone coupler. Other interface types include RS-422, RS-423, and MIL-188 (military). IBM 3270 and 3270-compatible terminals generally connect directly to a cluster controller via coaxial cable.

Some terminals contain an *integral modem* that can be connected directly to a communications line. In some cases, the vendor provides an integral *acoustic telephone coupler*, so that the terminal can be connected to a conventional telephone handset.

PRICING AND AVAILABILITY

Terminal pricing is provided for unit quantities (one terminal) unless otherwise specified. *Purchase prices* are shown for the complete terminal (including keyboard, display, and controller) for stand-alone units, and for the keyboard/display station and terminal controller for cluster units. The *monthly and annual prime-shift maintenance charges* show the cost of service during regular business hours (usually 9 a.m. to 5 p.m., Monday through Friday).

Single entries generally indicate the price of the basic unit without options; price ranges show the price of the basic unit and the price of an expanded unit with all options, or the price of the low end and high end of a multiple-unit family. In general, all prices exclude ancillary devices.

Date of announcement indicates the date that the terminal was unveiled to the public.

Date of first production delivery indicates when the first production model of each terminal was delivered (or is scheduled to be delivered) to a customer.

Display units installed to date shows how many display units of each type had been delivered to customers as of approximately December 5, 1985. All figures were supplied by the vendors themselves, and a number of companies chose not to release this information.

Serviced by specifies the party responsible for maintaining the terminal. In some cases, the vendor provides total service; in others, a national service organization is responsible. Service is sometimes rendered under the combined efforts of both the vendor and an independent service organization; usually in this situation, the vendor handles those areas close to its headquarters or where it has a multiplicity of installations, and the service company handles other geographical areas.

COMMENTS

Comments at the bottom of the charts describe significant or unusual features, capabilities, or applications which are not reflected in the standard entries.

VENDORS

Listed below, for your convenience in obtaining additional information, are the full names and addresses of the 87 vendors whose products are summarized in the comparison charts.



Zentec's Zephyr 100 emulates the older Digital VT100; the company also offers a model with VT220 emulation. The Zephyr 100 conforms with the ANSI X3.64 standard for command code compatibility.

Altos Computer Systems, 2641 Orchard Parkway, San Jose, CA 95134. Telephone (408) 946-6700.

Ampex Corporation, Computer Products Division, 200 N. Nash Street, El Segundo, CA 90245. Telephone (213) 640-0150.

Anderson Jacobson, Inc., 521 Charcot Avenue, San Jose, CA 95131. Telephone (408) 263-8520.

Ann Arbor Terminals, Inc., 6175 Jackson Road, Ann Arbor, MI 48103. Telephone (313) 663-8000.

Applied Digital Data Systems, Inc. (ADDS), 100 Marcus Boulevard, Hauppauge, NY 11787. Telephone (516) 231-5400.

AT&T Information Systems, 1 Speedwell Avenue, Morristown, NJ 07960. Telephone (201) 898-2000.

AT&T Teletype (see AT&T Information Systems).

Beehive International, 4910 Amelia Earhart Drive, Salt Lake City, UT 84125. Telephone (801) 355-6000.

The Braegen Corporation, 525 Los Coches Street, Milpitas, CA 95035. Telephone (408) 945-1900.

Burroughs Corporation, Burroughs Place, Detroit, MI 48232. Telephone (313) 972-7000.

C & W Distribution Products, 1111 W. Mockingbird Lane, Suite 1400, Dallas, TX 75247. Telephone (214) 630-9700.

Carterfone Communications Corporation, 1111 W. Mocking-bird Lane, Suite 1400, Dallas, TX 75247. Telephone (214) 630-9700.

Chi Corporation, 26055 Emery Road, Cleveland, OH 44128. Telephone (216) 831-2622.

CIE Systems, Inc., 2515 McCabe Way, Irvine, CA 92713-6579. Telephone (714) 660-1800.

CIE Terminals, Inc., 2505 McCabe Way, Irvine, CA 92714-6297. Telephone (714) 660-1421.

Computer Communications, Inc., (CCI), 2610 Columbia Street, Torrance, CA 90503. Telephone (213) 320-9101.

Comterm Inc., 110 Hymus Boulevard, Pointe Claire, Quebec, Canada H9R 1E8. Telephone (514) 694-4332.

Concurrent Computer Corporation, (a Perkin-Elmer Company), 2 Crescent Place, Oceanport, NJ 07757. Telephone (201) 870-4500.

Control Concepts, (Division of Presearch, Inc.), P.O. Box 2367, 12004B Ballsford Road, Manassas, VA 22110. Telephone (703) 361-5545.

Control Data Corporation, 8100 34th Avenue South, P.O. Box 0, Minneapolis, MN 55440. Telephone (612) 853-8100.

CTi Data Corporation, 5249 North Boulevard, Raleigh, NC 27604. Telephone (919) 876-8731.

Cybernex Limited, 1257 Algoma Road, Ottawa, Ontario, Canada K1B 3W7. Telephone (613) 741-1540.

Data General Corporation, 4400 Computer Drive, Westboro, MA 01580. Telephone (617) 366-8911.

Datamaxx USA Corporation, 1815 South Gadsden Street, Tallahassee, FL 32301. Telephone (904) 224-8213.

Datapoint Corporation, 9725 Datapoint Drive, San Antonio, TX 78284. Telephone (512) 699-7000.

Datastream Communications, Inc., 2520 Mission College Boulevard, Santa Clara, CA 95050. Telephone (408) 986-8022.

Davox Corporation, 4 Federal Street, Billerica, MA 01821. Telephone (617) 667-4455 or (800) 343-1152.

Decision Data Computer Corporation, 100 Witmer Road, Horsham, PA 19044. Telephone (215) 674-3300.

Delta Data Systems Corporation, 2595 Metropolitan Drive, Trevose, PA 19047. Telephone (215) 322-5400.

Digital Equipment Corporation, 146 Main Street, Maynard, MA 01754. Telephone (617) 897-5111.

Direct, Inc., 4201 Burton Drive, Santa Clara, CA 95054. Telephone (408) 980-1414.

Esprit Systems, Inc., 100 Marcus Drive, Melville, NY 11747. Telephone (516) 293-5600.

Falco Data Products, Inc., 1294 Hammerwood Avenue, Sunnyvale, CA 94089. Telephone (408) 745-7123.

General Business Technology, Inc., 1891 McGaw Avenue, Irvine, CA 92714. Telephone (714) 261-1891.

General Digital Corporation, 700 Burnside Avenue, East Hartford, CT 06108. Telephone (203) 528-9041.

Harris Corporation, Information Terminals Group, 16001 Dallas Parkway, P.O. Box 400010, Dallas, TX 75240. Telephone (214) 386-2000.

Hewlett-Packard, 1820 Embarcadero Road, Palo Alto, CA 94303. Contact your local Hewlett-Packard sales office.

Honeywell Information Systems, 200 Smith Street, Waltham, MA 02154. Telephone (617) 895-6000.

Human Designed Systems, Inc., 3440 Market Street, Philadelphia, PA 19104. Telephone (215) 382-5000 or (800) 437-1551.

Icot Corporation, 830 Maude Avenue, Mountain View, CA 94543. Telephone (415) 964-4635.

Informer Computer Terminals, Inc., 22936 Mill Creek Road, Laguna Hills, CA 92653. Telephone (714) 855-3112.

Intecolor, an Intelligent Systems Company, 225 Technology Park, Norcross, GA 30092. Telephone (404) 449-5961.

International Business Machines Corporation (IBM), Old Orchard Road, Armonk, NY 10504. Contact your local IBM representative.

ITT Courier Terminal Systems, Inc., 1515 West 14th Street, Tempe, AZ 85281. Telephone (602) 894-7000.

ITT Qume Corporation, 2350 Qume Drive, San Jose, CA 95131. Telephone (408) 942-4000.

➤ Kimtron Corporation, 1705 Junction Court, San Jose, CA 95112. Telephone (408) 286-8790.

Lanpar Technologies Inc., 85 Torbay Road, Markham, Ontario, Canada L3R 1G7. Telephone (416) 475-9123.

Lear Siegler, Inc., Data Products Division, 901 East Ball Road, Anaheim, CA 92805. Telephone (714) 778-3500 or (800) 532-7373.

Lee Data Corporation, 7075 Flying Cloud Drive, Minneapolis, MN 55344. Telephone (612) 828-0300.

Liberty Electronics, 625 Third Street, San Francisco, CA 94107. Telephone (415) 543-7000.

Link Technologies, Inc., 2260 Paragon Drive, San Jose, CA 95131. Telephone (408) 943-0142.

Matra Communication, Inc., 1202 Charleston Road, Mountain View, CA 94043. Telephone (415) 960-3600.

McDonnell Douglas Computer Systems Company, 4000 West MacArthur Boulevard, Newport Beach, CA 92660. Telephone (714) 250-1000.

Megadata Corporation, 35 Orville Drive, Bohemia, NY 11716. Telephone (516) 589-6800.

Memorex Corporation, Communications Group, 2300 Central Expressway, Santa Clara, CA 95050-2566. Telephone (408) 987-1000.

Micro-Term, Inc., 512 Rudder Road, Fenton, MO 63026. Telephone (314) 343-6515.

Microdata Corporation (see McDonnell Douglas).

NCR Corporation, 1700 South Patterson Boulevard, Dayton, OH 45479. Telephone (513) 445-5000.

Nixdorf Computer Corporation, 300 Third Avenue, Waltham, MA 02154. Telephone (617) 890-3600.

Paradyne Corporation, 8550 Ulmerton Road, Largo, FL 33540. Telephone (813) 530-2000.

Perfect Terminal, Inc., 3319 Seldon Court, Fremont, CA 94538. Telephone (415) 656-8383.

PHAZE Information Machines Corporation, 7650 East Redfield Road, Scottsdale, AZ 85260. Telephone (602) 991-6855 or (800) 423-2994.

Plessey Peripheral Systems, Inc., Distributor Products Division, 15542 Mosher Avenue, Tustin, CA 91680. Telephone (714) 731-2440.

Prime Computer, Inc., Prime Park, Natick, MA 01760. Telephone (617) 655-8000.

RCA MicroComputer Products, New Holland Avenue, Lancaster, PA 17604. Telephone (717) 397-7661.

Soroc Technology, Inc., 161 Freedom Avenue, Anaheim, CA 92801. Telephone (714) 992-2860.

Sperry Corporation, Information Systems Group, P.O. Box 500, Blue Bell, PA 19424. Telephone (215) 542-4011.

Tandberg Data, Inc., 1590 South Sinclair, Anaheim, CA 92806. Telephone (714) 978-6771.

Tandem Computers, Inc., 19191 Vallco Parkway, Cupertino, CA 95014-2599. Telephone (408) 725-6000.

Tandy Corporation, 1800 One Tandy Center, Fort Worth, TX 76102. Telephone (817) 390-3300.

Tatung Company of America, Inc., 2850 El Presidio Street, Long Beach, CA 90810. Telephone (213) 979-7055.

TEC, Inc., 2727 North Fairview Avenue, P.O. Box 5646, Tucson, AZ 85703. Telephone (602) 792-2230.

Tektronix, Inc., Information Display Division, P.O. Box 500, Beaverton, OR 97077. Telephone (503) 644-0161.

Telegenix, Inc., 26 Olney Avenue, Cherry Hill, NJ 08003. Telephone (609) 424-5220.

Teleray, Division of Research Inc., P.O. Box 24064, Minneapolis, MN 55424. Telephone (612) 941-3300.

TeleVideo Systems, Inc., 55 East Brokaw Road, San Jose, CA 95150-6602. Telephone (408) 971-0255.

Telex Computer Products, Inc., 6422 E. 41st Street, Tulsa, OK 74135. Telephone (918) 627-1111.

Term-Tronics Inc., 4990 Viewridge Avenue, San Diego, CA 92123. Telephone (916) 565-6330.

Texas Instruments, Inc., P.O. Box 2909, Austin, TX 78769. Telephone (512) 250-7111 or (800) 527-3500.

Thomas Engineering Company, 2440 Stanwell Drive, Concord, CA 94520. Telephone (415) 680-8640.

3M Teleterminals, 311 Turquoise Street, Milpitas, CA 95035. Telephone (408) 943-1970.

Visual Technology, Inc., 1703 Middlesex Street, Lowell, MA 01851. Telephone (617) 459-4903.

Volker-Craig Ltd., 330 Weber Street North, Waterloo, Ontario, Canada N2J 3H6. Telephone (519) 884-9300.

Wang Laboratories, Inc., One Industrial Avenue, Lowell, MA 01851. Telephone (617) 459-5000.

Westinghouse Canada Inc., P.O. Box 5009, 777 Walker's Line, Burlington, Ontario, Canada L7R 4B3. Telephone (416) 528-8811.

Wyse Technology, Inc., 3571 North First Street, San Jose, CA 95134. Telephone (408) 433-1000.

Zenith Data Systems, 950 Milwaukee Avenue, Glenview, IL 60025. Telephone (312) 391-8860.

Zentec Corporation, 2400 Walsh Avenue, Santa Clara, CA 95051. Telephone (408) 727-7662.

Zilog, Inc., 1315 Dell Avenue, Campbell, CA 95008. Telephone (408) 370-8000. □

	_	γ	T	T	T
VENDOR AND MODEL	Altos 2	Altos 3	Altos 4	Altos 5	Ampex 210
ERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller Transportability	No	No	No	No	No
IBM compatibility	No	No	No	No	No
Teletype compatibility	Std.	No	No	No	Std.
Other compatibility	Altos, ANSI X3.41 ANSI X3.64	TeleVideo 910	TeleVideo 910 & 925, ADDS Viewpoint	Altos 2, Tektronix 4010/4014	ADDS, LSI, Qume, Esprit, Televideo
ISPLAY PARAMETERS	ANSI A3.04		925, ADDS Viewpoliti	4010/4014	Espirit, relevided
Display capacity, no. of char.	2000, 5280	3432	2080	3432	2000
Memory capacity, no. char./lines/pages		3432 char.	2080 char.	4160 char.	80/25/1
Screen arrangement, lines x char./line	25x80, 40x132	26x80/132	26x80	26x80/132	25x80
Screen area (diagonal), inches	14	14	14	14	14
Tilt/swivel screen	Std.	Std.	Std.	Std.	Std.
Total displayable symbols Symbol formation	512 7x12/5x7 dot matrix	96 ASCII + graphics 10x13, 9x13 dot	96 ASCII + graphics 7x11 dot matrix	96 ASCII + graphics 10x13, 9x13 dot	169 ASCII, graphic 7x11 in 9x12 field
Character phosphor	P31 green	P31 green	P31 green	P31 green	PC134 amber or P3
• •				1	green
Color capability	No	No	No	No	No
Graphics Programmable field/char. highlighting via:	No	No	No	Opt.	Line std.
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank Bold	Std.	Std. Std.	Std.	Std. Std.	Std. Half intensity
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	Std.	Std.	Std.	Std.	No
Scroll	Up, down, smooth	Up/down, smooth	Up/down, smooth	Up/down, smooth	Up and smooth
Paging Selectable cursor blinking	3 std. (25x80) Std.	No Std.	No Std.	2 std. Std.	No Std.
Addressable/readable cursor	Std.	Std.	Std.	Std.	Both std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows Tabulation	Std. Fwd./back. std.	Std. Forward std.	Std. Fwd./back std.	Std. Forward std.	No Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Std.	Std.	Std.	Std.	Char./line/screen
EYBOARD PARAMETERS					std.
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
•	'	1 "	1	1	''
Character/code set	128 ASCII	128 ASCII Std.	128 ASCII Std.	128 ASCII Std.	128 ASCII Std.
Detachability Program function keys	Std. 16 plus shifted	16 plus shifted	16 plus shifted	16 plus shifted	14 std.
mogram ramonom koyo	std.	std.	std.	std.	
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed	No	No	No	No	No
Composite video	No	No	No	No	No
Port for cust -supplied devices	RS-232-C	RS-232-C	RS-232-C	RS-232-C	Bidirectional std.
Other vendor-supplied devices				_	_
RANSMISSION PARAMETERS Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Async.; sync. opt.	Asynchronous
Communications protocol	ASCII	ASCII	ASCII	ASCII; SDLC opt.	ASCII
Code Speed, bits/second	ASCII 50-19,200	ASCII 110-19,200	ASCII 110-19,200	ASCII 110-19,200; 1M	ASCII 50-19,200
Format	Character	Char./block	Char./line/block	Char./line/block	Char./line/block
Multipoint operation	No	No	No	Opt.	No
Terminal interface	RS-232-C	RS-232-C	RS-232-C	RS-232-C/RS-422	RS-232-C
Integral modem	No	No	No	No	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY	005	705	405	00E 1 20E	460
Display station, purchase Controller, purchase	995	795	495	995-1,295	469
Monthly prime-shift maintenance		_	_	_	
Annual prime-shift maintenance	-			_	
Date of announcement	11/82	6/84	10/85	2/86	5/84
Date of first production delivery Display units installed to date	3/83 2,500	9/84	1/86	5/86	7/84
Serviced by	Altos/TRW	Altos/TRW	Altos/TRW	Altos/TRW	-
•	,		,	1	1.0
COMMENTS		1		Optional RS-422	16 resident emula-
				multidrop	tions total; DIN keyboard w/adjust
	1 .				able slope; 7 nat-
					ional char. sets;
	1	1	1	ı	CRT saver; fast
	1		1	i .	
					screen refresh; dynamic focus;
					screen refresh;

VENDOR AND MODEL	Ampex 219	Ampex 220	Ampex 230	Anderson Jacobson AJ 510	Anderson Jacobson AJ 520
TERMINAL DESCRIPTION					7.5 55
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller	_		_	1	1
Transportability	No	No	No	No	No
IBM compatibility	No	No	No	2741 (opt.)	No
Teletype compatibility Other compatibility	Std. DEC VT102/VT131/	Std. DEC VT220/VT100/	Std. See comments	Std.	Std. DEC VT100/VT52
Other compatibility	VT52, Wyse WY-75	VT52	See comments		DEC V1100/V152
ISPLAY PARAMETERS					
Display capacity, no. of char.	3432	3200	3432	1920	1920, 3168
Memory capacity, no. char./lines/pages	80/26/2 or 132/26/1	80/25/1 or 132/25/1	80/26/2 or 132/26/1		16K
Screen arrangement, lines x char./line	26x80/132	25x80/132	26x80/132	24x80	24x80/132 plus status line
Screen area (diagonal), inches	14	14	14	15	15
Tilt/swivel screen	Std.	Std.	Std.	No	Tilt std.
Total displayable symbols	256 ASCII	256 ASCII	238 ASCII, graphics	128 ASCII	128 ASCII
Symbol formation	7x11 in 9x12 field	7x11 in 9x12 field	7x11 in 10x12 field	7x10 dot matrix	10x12 dot matrix
Character phosphor	PC134 amber or P31	PC134 amber or P31	PC134 amber or P31	P31 green std.	P31 green std.;
Color capability	green No	green No	green No	No	amber opt. No
Graphics	Line std.	Line std.	Line/block std.		
Programmable field/char. highlighting via:			1		
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	No Sed	No Std	Std.	No Ctd	No
Bold Reverse	Std. Std.	Std. Std.	Half intensity Std.	Std. Std.	Std. Std.
Double size	Std.	Std.	Std.	Std.	Std.
Scroll	Up and smooth	Up and smooth	Up and smooth	Up/down std.	Up/down std.
Paging	2 std., 4 opt.	1 std., 4 opt.	2 std., 4 opt.	No	8 std.
Selectable cursor blinking	Std.	No	Std.	Std.	Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Std.	Std.
Protected format	Std.	No	Std.	Std.	No
Partial screen transmit Split screen/windows	Std. 2 std.	Std. 2 std.	Std.	Std. No	No 2
Split screen/windows Tabulation	Std.	Std.	Fwd./back std.	Fwd. std.	Fwd. std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase .	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen
	std.	std.	std.	std.	std.
EYBOARD PARAMETERS	Tumanamitan	Tomassuitan	Tomassidan	T	T a
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	ASCII	ASCII	128 ASCII	128 ASCII; APL opt.	128 ASCII; APL or
Detachability	Std.	Std.	Std.	No	Std.
Program function keys	16 std. (32 shift)	15 std.	16 std. (32 shift-	No	24 std.
			able)		
Numeric keypad NCILLARY DEVICES	Std.	Std.	Std.	Std.	Std.
Serial printer, type, and speed	No	No	No	Various, 30-200 cps	Various, 30-200 c
Line printer, type, and speed	No	No	No	No	No
Composite video	No	No	No	No	Std.
Port for custsupplied devices	Bidirectional std.	Bidirectional std.	Bidirectional std.	Std.	Std.
Other vendor-supplied devices	I—	l—		Diskette recorder,	Diskette recorder,
				acoustic coupler/ modems	acoustic coupler/ modems
				moderns	moderns
RANSMISSION PARAMETERS	İ	i			
Mode	Half/full-duplex	Full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Communications protocol Code	ASCII/ANSI ASCII	ASCII/ANSI ASCII	ASCII ASCII	ASCII ASCII	ASCII ASCII
Lode Speed, bits/second	50-38,400	ASCII 50-19,200	50-38,400	110-9600	50-19,200
Format	Char./line/block	Char./block	Char./line/block	Char./line/page	Character
Multipoint operation	No	No	No	No	No
Terminal interface	RS-232-C std.; RS-	RS-232-C std.; RS-	RS-232-C std., RS-	RS-232-C std.;	RS-232-C std.;
	422, 20mA opt.	422, 20mA opt.	422, 20mA opt.	20mA opt.	20mA opt.
Integral modem	No	No	No	No	No
Integral acoustic coupler RICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	649	749	569	1,675-1,995	1,995-2,095
Controller, purchase	<u> </u>	—			
Monthly prime-shift maintenance		1—		27	31-34
Annual prime-shift maintenance		-	-		
Date of announcement	7/85	7/85	11/84	0.79	0/01
Date of first production delivery	7/85	11/85	12/84	9/78	9/81
Display units installed to date Serviced by				Anderson Jacobson	Anderson Jacobso
·					
OMMENTS	DEC VT100/VT102/	DEC VT220/VT100/	Ampex emulation	APL keyboard opt.;	APL unit includes
	VT131/VT52-compat-	VT52-compatible,	mode replaces Ampex	widely used in X-L	line mode, user-
	ible, plus native	plus native mode;	D30, D80, D81, D125	applications	defined overstrike
	mode; 16 programm-	programmable user	D150, D150E, & D175		memory, plus all
	able function keys; bidirectional	line; block mode; bidirectional	also emulates Tele- Video 914, 924, 950		video attributes except bold
	printer port; 2	printer port;	& Wyse WY-50; DIN		SACOPE DOIG
	display pages std.;	variable speed	keyboard w/adjust-		
				I	1
	seperate status &	smooth scroll	able slope; 9 nat- ional char. sets	!	

Standalone or cluster Standalone Stand	Maximum displays/controller Tampsopratishity Std	VENDOR AND MODEL	Ann Arbor Ambassador XL	Ann Arbor Ambassador GXL	Ann Arbor Ambassador GXL+	Ann Arbor Guru XL	Ann Arbor Genie+ XL
Maintum displays/controller No.	Maximum displays/controller Transportability Transportability Std. St		Standalone	Standalone	Standalone	Standalone	Standalone
Bith compatibility	Bibl compatibility	Maximum displays/controller	l 			I—	
Findings Side Compatibility Side Compatibility Side Compatibility Compatibilit	Triethype compatibility DEC VT100/VT52. ANSIX 3.64 DEC VT100/VT52. DEC VT100/VT52. DEC VT100/VT52. DEC VT100/VT52. DEC VT100/VT54. DEC VT100/DEC VEX. DEC VT100/VT54. DEC VT100/DEC VEX. DEC VT100/DEC						
DEC VT100, Tels-	DEC VT100, Tel- SISTALY PARTAMETERS						
SPIA.A.Y PARAMETERS Spide Capacity, no. of classification Capacity Capacity, no. of classification Capacity Capacity, no. of classification Capacity	SPIA.A.Y PARAMETERS Spide		DEC VT100/VT52,	DEC VT100, Tek-	DEC VT100, Tek-	DEC VT100,	DEC VT100/VT52,
		ISPLAY PARAMETERS	ANSI X3.64	tronix 4010/4014	tronix 4010/4014	ANSI X3.64	ANSI X3.64
Sicree S	Screen rangement, lines x char / line 18x80 up to 60x80 18x80 up 60x	Display capacity, no. of char.					
Screen area (diagonal), inches 15 15 15 15 15 15 15 1	Screen area (diagonal), inches 15	Memory capacity, no. char./lines/pages					
Std	Titly severel screen Store 128 ASCII	Screen arrangement, lines x char./line	18x80 up to 60x80	18880 10 60880	10000 10 0000	Op to dox 170	30x60
128 ASCII	128 ASCII 728 ASCII 728 ASCII 728 ASCII 728 ASCII 728 ASCII 728 Green 728						
Symbol formation	Symbol formation						128 ASCII
No	No	Symbol formation	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix
Std.	Std.	Character phosphor	P39 green	P39 green	P39 green	P4 white	Amber
Variety Vari	Programmable field/char. highlighting visit Std. Std	Color capability	No	No	No	No	No
Underline Blink	Undarline Blank		 	Std.	Std.		_
Blink Blork Std.	Blink Blork Std.		Std.	Std.	Std.	Std.	Std.
Std.	Sid Std	Blink	Std.	Std.	Std.	Std.	Std.
Std. Up/down, slow std.	Std.						
Double size No	Double size Stroit Stroit Stroit Up/down slow std. Up/down, slow std. Up/down, slow std. Uz down, slow std. Uz down						
Sid Std	Seging Std. 2 std. 2 std. 2 std. 2 std. 3 td.	Double size	No	No	No	Std.	No
Side Std	Sale-citable cursor blinking Addressable/readable cursor Protected formst Protected formst Std.						
Addressable/readable cursor protected forms of protecting forms of	Addressable/readable cursor Protected format Std. Std. Std. Std. Std. Std. Std. Std	Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Std. Std. Std. N prog. std. Fwd./back std. Std. N prog. std. Fwd./back std.	Partial screen transmit Spilt screen/windows Tabulation Character insert/delete Line inse						
N prog. std. N pr	Split screen/windows Tabulation Fred/,back std. Std. Charricleire insert/delete Line insert/delete Std. Std. Std. Std. Std. Std. Std. Std.						
Std.	Std.		N prog. std.	N prog. std.	N prog. std.	N. prog std.	N prog. std.
Std. Std. Char./line/screen Std.	Std. Std. Std. Char, /line/screen std.						
Char_/line/screen Std. S	Char_/line/screen Std. S						
Typewriter Typ	Typewriter		Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen
Typewriter Typ	Typewriter Typ	EVROARD PARAMETERS	std.	std.	std.	std.	std.
Std.	Std.		Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Std.	Detachability Program function keys 111 std.	Character/code set	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128 ASCII
Numeric keypad NCILLARY DEVICES Scrial printer, type, and speed Line printer, type, and speed Li	Numeric keypad NCLLARY DEVICES Sorial printer, type, and speed Line printer, type, and speed Line printer, type, and speed Corposite video Port for cust, supplied devices Other vendor-supplied devices RANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Multipoint operation Terminal interface Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Con						
NOLLARY DEVICES Serial printer, type, and speed Line printer, type, and speed Composite video Port for custsupplied devices Other vendor-supplied devices Other vendor-supplied devices RANSMISSION PARAMETERS Mode Technique Communications protocol Code Code Communications protocol Code Communications protocol Code Code Communications protocol Code Communications protocol Code Code Communications protocol Code Code Code Communications protocol Code Code Code Code Code Code Code Code	NOCILLARY DEVICES Sorial printer, type, and speed Line printer, type, and speed Composite video Port for custsupplied devices Officer vendor-supplied devices Officer vendor-supplied devices Officer vendor-supplied devices Half/full-duplex Asynchronous Asynchrono	Program function keys	111 std.	111	111	111 std.	111 std.
NOLLARY DEVICES Serial printer, type, and speed Line printer, type, and speed Composite video Port for custsupplied devices Other vendor-supplied devices Other vendor-supplied devices RANSMISSION PARAMETERS Mode Technique Communications protocol Code Code Communications protocol Code Communications protocol Code Code Communications protocol Code Communications protocol Code Code Communications protocol Code Code Code Communications protocol Code Code Code Code Code Code Code Code	NOCILLARY DEVICES Sorial printer, type, and speed Line printer, type, and speed Composite video Port for custsupplied devices Officer vendor-supplied devices Officer vendor-supplied devices Officer vendor-supplied devices Half/full-duplex Asynchronous Asynchrono	Numeric keypad	Std.	Std.	Std.	Std.	Std.
Line printer, type, and speed Composite video Port for cust, supplied devices Other vendor-supplied devices Half/full-duplex Asynchronous Ascil, ANSI X3.64 Asynchronous Ascil, ANSI X3.64 Ascil, Ani	Line printer, type, and speed Composite video Port for custsupplied devices Other vendor-supplied devices Other vendor-suppl	NCILLARY DEVICES					
Composite video Port for custsupplied devices Other vendor-supplied devices Std. — Half/full-duplex Asynchronous ASCII, ANSI X3.64 ASCII, Interpretation Terminal interface Integral moderm Integral acoustic coupler Integral	Composite video Port for cust, supplied devices Other vendor-supplied devices Half/full-duplex Asynchronous Asynch	Serial printer, type, and speed					
ANSMISSION PARAMETERS Mode Asynchronous Asynchronous Asynchronous AsCII, ANSI X3.64 ASCII ASCII, ANSI X3.64 ASCII	TRANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Multipoint operation Terminal interface Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance A						
RANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Multipoint operation Terminal interface Integral modern Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of first production delivery Display units installed to date Serviced by OMMENTS Half/full-duplex Asynchronous Ascil Ascil In 10-19,200 Char,/line/block No	RANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Multipoint operation Terminal interface RS-232-C Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Annual prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by CMMENTS Half/full-duplex Asynchronous AscII, ANSI X3.64 ASCII ASC		Std.	Std.	Std.	Std.	Std.
Mode Technique Communications protocol Code Code Code Code Code Code Code Code	Mode Technique Communications protocol Code Code Code Code Code Code Code Code	Other vendor-supplied devices					
Mode Technique Communications protocol Code Code Code Code Code Code Code Code	Mode Technique Communications protocol Code Code Code Code Communications protocol Code Code Code Code Code Code Code Code	RANSMISSION PARAMETERS					
Communications protocol Code Code Code Code Code Code Code Code	Communications protocol Code Code Code Code Code Code Code Code	Mode					
Speed, bits/second Format Multipoint operation Terminal interface Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual	Code Speed, bits/second Speed, b			ASCII ANSI X3 64			ASCIL ANSI X3 64
Char./line/block No	Format Multipoint operation Terminal interface Char./line/block No No No No RS-232-C	Code	ASCII	ASCII	ASCII	ASCII	ASCII
Multipoint operation Terminal interface No RS-232-C RS-2	Multipoint operation Terminal interface No RS-232-C Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Annual prime-shift maintenance Annual prime-shift maintenance Date of first production delivery Display units installed to date Serviced by OMMENTS No		110-19,200 Char /line /hlash				
Terminal interface RS-232-C RS	Terminal interface RS-232-C RS						
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS No	Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purch						
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS No	Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purch	Integral modem	No	No	No	No	No
Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of first production delivery Display units installed to date Serviced by OMMENTS Display station, purchase 1,595 3,090	Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS Display station, purchase 1,595	Integral acoustic coupler					
Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS	Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS		1.595	3.090	3.590	2.395	1.395
Annual prime-shift maintenance Date of announcement 7/84 10/	Annual prime-shift maintenance Date of announcement T/84 Diate of first production delivery Display units installed to date Serviced by Ann Arbor/unit exchange Implements the ANSI X3.64-1979 standard; user-definable operation; user- selectable display	Controller, purchase			-		
Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS Ann Arbor/unit exchange Implements the ANSI X3.64-1979 standard; user-definable operation; user-selectable display Ann Arbor/Unit Exchange Alphanumeric/graph-ics terminal with user-definable characters 7/84 10/84 11/84 10/84 11/84 10/84 11/84 10/84 11/84 10/84 1	Date of first production delivery Display units installed to date Serviced by OMMENTS OMMENTS Date of first production delivery 10/84 11/84 1	Monthly prime-shift maintenance					
Date of first production delivery Display units installed to date Serviced by OMMENTS 10/84 Ann Arbor/unit exchange Implements the ANSI X3.64-1979 standard; user-definable operation; user-selectable display 10/84 Ann Arbor/Unit Exchange Alphanumeric/graphics terminal with user-definable characters 10/84 Ann Arbor/Unit Exchange Alphanumeric/graphics terminal with user-definable characters 10/84 Ann Arbor/Unit Exchange Alphanumeric/graphics terminal with user-definable characters	Date of first production delivery Display units installed to date Serviced by OMMENTS In Arbor/unit exchange Implements the ANSI X3.64-1979 standard; user-definable operation; user-selectable display Display units installed to date In Arbor/Unit exchange Implements the ANSI X3.64-1979 standard; user-definable operation; user-selectable display In Arbor/Unit Exchange In Ann Arbor/Unit Exchange Alphanumeric/graphics terminal with user-definable characters In I/84 In I/84 Ann Arbor/Unit Exchange Alphanumeric/graphics terminal with user-definable characters In I/84 Ann Arbor/Unit Exchange Alphanumeric/graphics terminal with user-definable characters		7/84	7/84	10/84	7/84	7/84
Serviced by Ann Arbor/unit exchange OMMENTS Implements the ANSI National State of the Ansile operation; user-selectable display Ann Arbor/Unit Exchange Ann Arbor/Unit Exchange Alphanumeric/graphics terminal with Tektronix 4010/4014 compatibility Ann Arbor/Unit Exchange Alphanumeric/graphics terminal with user-definable characters Ann Arbor/unit exchange Ann Arbor Marbor/unit exchange Ann Arbor/unit exchange	Serviced by Ann Arbor/unit exchange OMMENTS Implements the ANSI X3.64-1979 standard; user-definable operation; user-selectable display	Date of first production delivery					
exchange Exchange Exchange Exchange Alphanumeric/graphics terminal with user-definable operation; user-selectable display Exchange Exchange Alphanumeric/graphics terminal with user-definable compatibility Exchange Alphanumeric/graphics terminal with user-definable characters Exchange Exchange Alphanumeric/graphics terminal with user-definable characters Exchange Exchang	exchange Exchange Exchange Exchange Alphanumeric/graph- ics terminal with Tektronix 4010/4014 compatibility Selectable display Exchange Exchange Alphanumeric/graph- ics terminal with user-definable characters Exchange Exchange Alphanumeric/graph- ics terminal with user-definable Exchange Exchange Exchange		Ann Arbor/unit	Ann Arbor/Unit	Ann Arbor/Unit	Ann Arbor	Ann Arbor/unit
OMMENTS Implements the ANSI X3.64-1979 standard; user-definable operation; user-selectable display Alphanumeric/graphics terminal with user-definable compatibility Alphanumeric/graphics terminal with user-definable characters Alphanumeric/graphics terminal with user-definable characters Alphanumeric/graphics terminal with user-definable characters	OMMENTS Implements the ANSI X3.64-1979 standard; user-definable operation; user-selectable display Alphanumeric/graphics terminal with Tektronix 4010/4014 compatibility Alphanumeric/graphics terminal with user-definable characters Alphanumeric/graphics terminal with user-definable characters ANSI X3.64 compatible varieties terminal with user-definable characters	,	exchange	Exchange	Exchange	, sair Elloui	exchange
user-definable operation; user-selectable display	user-definable operation; user-selectable display Tektronix 4010/4014 compatibility user-definable characters	OMMENTS	Implements the ANSI	Alphanumeric/graph-	Alphanumeric/graph-		ANSI X3.64 com-
operation; user- compatibility characters selectable display	operation; user- compatibility characters selectable display						patible
			operation; user-				
rormat	rormat		selectable display				
			Tormat				

VENDOR AND MODEL	Ann Arbor VXL	ADDS Viewpoint	ADDS Viewpoint+	ADDS Viewpoint/ Color	ADDS Viewpoint/60+
TERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller Transportability	No	No	No	No	No
IBM compatibility	No	No	No	No	No
Teletype compatibility Other compatibility	Std. ANSI X3.64	Std. Lear Siegler ADM 3A	Std.	Std.	Std. ADDS Regent 40,
· · ·	ANSI AS.04	Lear Siegier ADIVI SA			Regent 60
DISPLAY PARAMETERS Display capacity, no. of char.	9600	1920	1920	1920	1920
Memory capacity, no. char./lines/pages	20K; 160/60/8	1 page	1 page	1 page	2 pages opt.
Screen arrangement, lines x char./line	36x80 up to 60x160	24x80	24x80 plus status line	24x80 plus status	24x80 plus status line; 48x80 opt.
Screen area (diagonal), inches	15	12	12	13	12
Tilt/swivel screen Total displayable symbols	Std. 128 ASCII	Std. 128 ASCII	Std. 128 ASCII	Std. 128 ASCII & 11 grph.	Tilt std. 128 ASCII
Symbol formation	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix	5x8 dot matrix	7x9 dot matrix
Character phosphor	P4 white std.	P31 green/amber	P4 white/P31 green	P22 color	P4 white/P31 green green
Color capability	No	No	No	8 colors std.	No
Graphics Programmable field/char. highlighting via:	No	No	No	11 graphics symbols	
Underline	Std.	Std.	Std.	No	Std.
Blink Blank	Std. Std.	Std. Std.	Std. Std.	Std.	Std.
Bold	Std.	Std.	No	No	No
Reverse Double size	Std.	Std. No	Std. No	Std. No	Std. No
Scroll	Up/down, smooth	Std.	Smooth std.	Up std.	Std.
Paging Selectable cursor blinking	8 Std.	No Std.	No Std.	1 std. Std.	No Std.
Addressable/readable cursor	Both std.	Both std.	Addressable only	Both std.	Both std.
Protected format Partial screen transmit	Std. Std.	No No	No No	Std. Std.	Std. No
Split screen/windows	8 std.	No	No	No	Std.
Tabulation Character insert/delete	Fwd./back std. Std.	No No	No No	Fwd./back std. Std.	Std.
Line insert/delete	Std.	No	No	Std.	Std.
Erase	Char./line/screen	Line/page std.	Line/page std.	Line/screen std.	Std.
KEYBOARD PARAMETERS					
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	128 ASCII	128 ASCII	128 ASCII	ASCII	128 ASCII
Detachability Program function keys	Std. 111 std.	Std. 3/6 std.	Std. 3 std.	Std. 8 std.	Std. 8 std.
,		,	· ·		
Numeric keypad ANCILLARY DEVICES	Std.	Std.	Std.	Std.	Std.
Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed Composite video	No No	No No	No No	No No	No No
Port for custsupplied devices	Std.	Std.	Std.	_	Std.
Other vendor-supplied devices	No				
TRANSMISSION PARAMETERS	11-16/6-11 1	11-16/6-11	11-16/5-11	11-16/6-11	LILLER (G. III.)
Mode Technique	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous
Communications protocol	ANSI X3.64	ASCII	ASCII	ASCII	ASCII
Code Speed, bits/second	ASCII 110-19,200	ASCII Up to 19,200	ASCII Up to 19,200	ASCII 110-19,200	ASCII 110-19,200
Format	Char./line	Character	Character	Char./line/block	Char./block
Multipoint operation Terminal interface	No RS-232-C	No RS-232-C	No RS-232-C	No RS-232-C std.;	No RS-232-C, 20mA, or
				RS-422, 20 mA opt.	RS-422
Integral modem Integral acoustic coupler	No No	No No	No No	No No	No No
PRICING AND AVAILABILITY				1	
Display station, purchase Controller, purchase	2,795	549	595 —	1,295	749
Monthly prime-shift maintenance	_	-		_	-
Annual prime-shift maintenance Date of announcement	6/85	10/85*	7/84	11/82	7/84
Date of first production delivery	10/85	10/85*	8/84	5/83	8/84
Display units installed to date Serviced by	Ann Arbor/unit	ADDS, NCR, TRW,	ADDS, NCR, TRW,	ADDS, NCR, TRW,	ADDS, NCR, TRW,
•	exchange	GE	GE	GE	GE
COMMENTS		*New functionality added			
]			
		[

VENDOR AND MODEL	ADDS Viewpoint/78	ADDS Viewpoint/78 Color	ADDS Viewpoint/90	ADDS Viewpoint/122	AT&T 4410
ERMINAL DESCRIPTION Standalone or cluster	Standalone	Either	Standalone	Standalone	Standalone
Maximum displays/controller	No	No	No	No	No.
Transportability IBM compatibility	3278	3279	No No	No No	No
Teletype compatibility	Std.	Std.	Std.	Std.	Std.
Other compatibility			_	DEC VT220/VT100/	ANSI X3.64
DISPLAY PARAMETERS				VT52	(where applicable)
Display capacity, no. of char.	1920	1920	960, 1920, 3168	1920, 3168	1920, 3168
Memory capacity, no. char./lines/pages	1 page	1 page	1-2 pages	1 page	1 page
Screen arrangement, lines x char./line	24x80 plus status	24x80	24x48/80/132	24x80/132	24x80/132 plus
Screen area (diagonal), inches	line 12	13	12	12	3 status lines
Tilt/swivel screen	Tilt std.	Tilt std.	Tilt std.	Std.	Tilt std.
Total displayable symbols	128 ASCII & 11 grph.	128 ASCII	128; 256 prog	256 ASCII	128 ASCII, 96 grapi
Symbol formation	7x8 dot matrix	7x8 dot matrix	7x9 dot matrix	7x7 dot matrix	5x7/7x9 dot matrix
Character phosphor	P4 white/P31 green	P22 color	P4 white/P31 green	P31 green/amber	White
Color capability	No	4 colors std.	No	No	No
Graphics	11 graphics symbols	No	Block, mosaic	No	Std.
Programmable field/char. highlighting via:	Cad	Cod	Cond	Cad	
Underline Blink	Std. Std.	Std. Std.	Std. Std.	Std. Std.	Std.
Blank	Std.	Std.	Std.	No	Std.
Bold	Std.	Std.	No	Std.	Half-intensity
Reverse	Std.	Std.	Std.	Std.	Std.
Double size Scroll	No Up std.	No Up std.	Std. Std.	Std. Smooth/4-speed	No Std.
Paging	No	No sta.	2 opt.	No	1 std.
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Addressable std.
Protected format Partial screen transmit	No No	No No	Std. Std.	No Std.	No No
Split screen/windows	No	No	Std.	Std.	2 std.
Tabulation	No	No	Std.	Std. & programmable	Std.
Character insert/delete	No	No	Std.	Std.	Std.
Line insert/delete	No	No	Std.	Std. Char./line/screen	Std.
Erase	Line/screen std.	Line/screen std.	Char./line/screen	std.	Line/screen std.
EYBOARD PARAMETERS	İ			1	
Style	IBM 3278-2	IBM 3278-2	Typewriter	Typewriter	Typewriter
Character/code set	ASCII	ASCII	128 ASCII	256 ASCII	128 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	24 std.	24 std.	15 std.	22 std.	8 std.
			l		. .
Numeric keypad ANCILLARY DEVICES	Std.	Std.	Std. N	Std. N	Std.
Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed	No	No	No	No	No
Composite video	No	No	No	No	No
Port for custsupplied devices Other vendor-supplied devices	No	No	Std.	Std.	Std.
Other vendor-supplied devices					
RANSMISSION PARAMETERS	Full doubles	Full display	Lieff (f. ill. domino	E. II dimles	Link field at minutes
Mode Technique	Full-duplex Asynchronous	Full-duplex Asynchronous	Half/full-duplex Asynchronous	Full-duplex Asynchronous	Half/full-duplex Asynchronous
Communications protocol	ASCII		ASCII	ASCII/ANSI	ANSI/ASCII
Code	ASCII	ASCII	ASCII	ANSI	ASCII
Speed, bits/second	110-19,200	110-19,200	Up to 9600	Up to 19,200	Up to 19,200
Format Multipoint operation	Character No	Character No	Char./line/block	Char./line/block No	Character No
Terminal interface	RS-232-C std.;	RS-232-C std.;	RS-232-C std.;	RS-232-C	RS-232-C
	RS-422, 20 mA opt.	RS-422, 20 mA opt.	20 mA opt.		
Integral modem	No	No	No	No	No
Integral acoustic coupler PRICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	1,095	1,595	1,195	795	902
Controller, purchase	I—	· · · · ·			
Monthly prime-shift maintenance				_	-
Annual prime-shift maintenance Date of announcement	11/82	5/83	12/81	9/85	4/83
Date of announcement Date of first production delivery	1/83	5/83	1st Q/82	11/85	3rd quarter 1983
Display units installed to date		 	l— '	_	
Serviced by	ADDS, NCR, TRW,	ADDS, NCR, TRW,	ADDS, NCR, TRW,	ADDS, NCR, TRW,	AT&T
COMMENTS	GE Emulator IBM	GE Color terminal	GE	GE	
COMMENTS	Emulates IBM 3278 Model 2	Color terminal designed to			
	when used with	access 3270			
	protocol converter	applications on an			
		IBM mainframe		1	
	1	when used with a protocol converter	1		
	1	p. Stocol Collegites	ſ	1	1
	1	1			
	,		,		

VENDOR AND MODEL	AT&T 4425	AT&T 4415	AT&T 4418	AT&T 5548	AT&T 5549
ERMINAL DESCRIPTION	7725	44.0	4410	3340	3343
Standalone or cluster	Standalone	Standalone	Standalone	Cluster	Cluster
Maximum displays/controller				32	32
Transportability	No	No	No	No	No
	No	No	3278	3278	3279
Teletype compatibility	Std. DEC VT102, UNIX,	Std. ANSI X3.64	Std.	No	No
Other compatibility	ANSI X3.64	(where applicable)			
ISPLAY PARAMETERS	711101 710.01	(Wilero applicable)			
Display capacity, no. of char.	1920, 3168	1920, 3168	1920, 3168	1920, 3564	1920, 2560
Memory capacity, no. char./lines/pages	78 or 54 lines	9600 char.	1 page		
Screen arrangement, lines x char./line	24x80/132 plus 3 status lines	24x80/132 plus 3 status lines	24x80/132 plus 3 status lines	24x80, 27x132 (13-inch only)	24/32x80
Screen area (diagonal), inches	12	12	12	12 or 13	13
Tilt/swivel screen	Tilt std.	Tilt std.	Tilt std.	Tilt std.	Tilt std.
Total displayable symbols	128 ASCII, 96 grph.	128 ASCII, 96 graph.	128 ASCII, graphics	96 EBCDIC	96 EBCDIC
Symbol formation	5x7/7x9 dot matrix	5x7/7x9 dot matrix	5x7/7x9 dot matrix	9x14/7x10 dot mat.	7x10/9x14 dot ma
Character phosphor	White, green, or	White	Amber or green	White	Color
0 - t	amber No	No	No	No	4 colors std.
Color capability Graphics	Std.	Std.	Std.	No No	No
Programmable field/char. highlighting via:	Old.	Ota.	Ota.	140	1.10
Underline	Std.	Std.	Std.	No	No
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold	Half-intensity Std.	Half-intensity	Half-intensity	No No	No No
Reverse Double size	No	Std. No	Std. No	No No	No No
Scroll	Std.	Std.	Std.	No	No
	Std.	Std.	1 std.	No	No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Std.	Std.	Addressable only	Both std.	Both std.
Protected format	Std.	Std.	No	Std.	Std.
Partial screen transmit Split screen/windows	Std. 4 std.	Std. Std.	No 2 std.	Std. No	Std. No
Tabulation	Std.	Std.	Std.	Std.	Std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Std.	Std.	Line/screen std.	Char./line/screen std.	Char./line/screen
EYBOARD PARAMETERS	T	T	IDM 2270		
Style	Typewriter	Typewriter	IBM 3278-style	Typewriter, data	Typewriter, data
Character/code set	128 ASCII	128 ASCII	128 ASCII	entry 96 EBCDIC	entry, ext. numeric 96 EBCDIC
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	11 std. (22 func-	16 std.	24 std.	24 std.	24 std.
	tions)				
Numeric keypad	Std.	Std.	No	Std.	Std.
NCILLARY DEVICES	NI.	N-		20 240	20 240 4
Serial printer, type, and speed	No No	No No	No No	30-340 cps dot mat. 220-300 lpm	30-340 cps dot m
Line printer, type, and speed Composite video	No	No	No	No	No
Port for custsupplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices	300/1200 bps modem/		300/1200 bps modem/		Light pen
	dialer opt.		dialer opt.		
RANSMISSION PARAMETERS Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Synchronous	Synchronous
Communications protocol	ASCII/ANSI X3.64	ANSI/ASCII	ASCII/ANSI	BSC, SNA/SDLC	BSC, SNA/SDLC
Code	ASCII	ASCII	ASCII	ASCII/EBCDIC	ASCII/EBCDIC
Speed, bits/second	Up to 19,200	Up to 19,200	Up to 19,200 Character	Up to 9600	Up to 9600
Format Multipoint operation	Char./block Std.	Char./block Std.	No	Block Std.	Block Std.
Terminal interface	RS-232-C	RS-232-C	RS-232-C	RS-232-C	RS-232-C
	 -		1		
ntegral modem	Opt.	No	Opt.	No	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY	1,265-1,720	1,492	1,080	1,411-2,573	2,573
Display station, purchase Controller, purchase	1,200-1,720			3,518-8,038	3,518-8,038
Monthly prime-shift maintenance	_		 		
Annual prime-shift maintenance	_	i—	_		
Date of announcement	9/84	4/83	5/84	4/83	5/84
Date of first production delivery	10/84	3rd quarter 1983	5/84	3rd quarter 1983	5/84
Display units installed to date Serviced by	AT&T	AT&T	AT&T	AT&T	AT&T
·					
OMMENTS			Features IBM 3270 emulation when used	Available in three	Attaches to 5544 5546 controller;
			with a protocol	models: 12 (12-in. screen, 1920-char.),	also known as
			converter	22 (13-in. screen,	E4540 Display
			,		
				1920-char.), & 25	System
				(13-in. screen, 1920	System
				(13-in. screen, 1920 & 3564-char.; attach	System
			21	(13-in. screen, 1920	System

VENDOR AND MODEL	AT&T 6518	AT&T 6528	AT&T 6529	AT&T 6538	AT&T 6539
ERMINAL DESCRIPTION					
Standalone or cluster	Cluster	Cluster	Cluster	Cluster	Cluster
Maximum displays/controller Transportability	32 No	32 No	32 No	32 No	32 No
IBM compatibility	3270 System	3270 System	3270 System	3270 System	3270 System
Teletype compatibility	No	No	No	No	No
Other compatibility	Digital VT220	Digital VT220	Digital VT220	Digital VT220	Digital VT220
ISPLAY PARAMETERS	1000	1000 0564	1920-3564	1000 2504 (-4)	1000 0504 (4)
Display capacity, no. of char. Memory capacity, no. char./lines/pages	1920	1920-3564 —	1920-3564	1920-3564 (x4)	1920-3564 (x4)
Screen arrangement, lines x char./line	24x80	24/32/43x80, 27x132	24/32/43x80, 27x132	24/32/43x80, 27x132	24/32/43x80, 27x132
Screen area (diagonal), inches	12	15	14	15	14
Tilt/swivel screen	Std.	Std.	Std.	Std.	Std.
Total displayable symbols Symbol formation	96 EBCDIC 9x13 dot matrix	96 EBCDIC/256 ASCII 9x16/12/9/14	96 EBCDIC/256 ASCII 9x16/12/9/14	96 EBCDIC/256 ASCII 9x16/12/9/14	96 EBCDIC/256 ASO 9x16/12/9/14
Character phosphor	Amber or green	Amber or green	Color	Amber or green	Color (background,
, ·				1	foreground select.)
Color capability Graphics	No No	No Line drawing set	7 colors Line drawing set	7 colors	7 colors Line drawing set
Programmable field/char, highlighting via:	NO	Line drawing set	Line drawing set	Line drawing set	Line drawing set
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank Bold	Std.	Std.	Std. Std.	Std. Std.	Std. Std.
Reverse	No	No	No	No	No
Double size	No	No	No	No	No
Scroll Paging	No No	Std. (VT220) No	Std. (VT220) No	Std. (VT220) No	Std. (VT220) No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Addressable only	Both std.	Both std.	Both std.	Both std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit Split screen/windows	Std. No	Std. Split screen	Std. Split screen	Std. 4 windows std.	Std. 4 windows std.
Tabulation	Std.	Std.	Std.	Std.	Std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete Erase	Std. Char./line/screen	Std. Char./line/screen	Std. Char./line/screen	Std. Char./line/screen	Std. Char./line/screen
21030	std.	std.	std.	std.	std.
CEYBOARD PARAMETERS	<u> </u>		- ·.		
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	EBCDIC	EBCDIC/ASCII	EBCDIC/ASCII	EBCDIC/ASCII	EBCDIC/ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	24 std.	24 std.	24 std.	24 std.	24 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
ANCILLARY DEVICES	400	400	400	400	400
Serial printer, type, and speed Line printer, type, and speed	400 cps impact 300 lpm belt	400 cps impact 300 lpm belt	400 cps impact 300 lpm belt	400 cps impact 300 lpm belt	400 cps impact 300 lpm belt
Composite video	No	No No	No	No	No
Port for custsupplied devices	 -	<u></u>	-	Opt. (RS-232-C)	Opt. (RS-232-C)
Other vendor-supplied devices	Alarm	Alarm, keylock	Alarm, keylock	Alarm, keylock, light pen	Alarm, keylock, light pen
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique Communications protocol	Synchronous BSC, SDLC, X.25	Sync./async. BSC, SDLC, X.25	Sync./async. BSC, SDLC, X.25	Sync./async. BSC, SDLC, X.25	Sync./async. BSC, SDLC, X.25
Code	EBCDIC/ASCII	EBCDIC/ASCII	EBCDIC/ASCII	EBCDIC/ASCII	EBCDIC/ASCII
Speed, bits/second	1200-64,000	300-64,000	300-64,000	300-64,000	300-64,000
Format	Block	Char./block	Char./block	Char./block	Char./block
Multipoint operation Terminal interface	Std. Twisted-pair,	Std. Twisted-pair,	Std. Twisted-pair,	Std. Twisted-pair,	Std. Twisted-pair,
	coaxial cable	coaxial cable	coaxial cable	coaxial cable	coaxial cable
Integral modem	No	No	No	No	No
Integral acoustic coupler PRICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	Contact vendor	1,950	2,195	2,645	2,895
Controller, purchase	7,880-up	7,880-up	7,880-up	7,880-18,630	7,880-18,630
Monthly prime-shift maintenance Annual prime-shift maintenance	Contact vendor Contact vendor	Contact vendor Contact vendor	Contact vendor Contact vendor	Contact vendor Contact vendor	Contact vendor Contact vendor
Date of announcement	10/85	10/85	10/85	10/85	10/85
Date of first production delivery	12/85	12/85	12/85	12/85	12/85
Display units installed to date Serviced by	AT&T	AT&T	AT&T	AT&T	AT&T
•		1		1	
COMMENTS	Part of 6500	Part of 6500	Part of 6500	Part of 6500	Part of 6500
	Multifunction Communication	Multifunction Communication	Multifunction Communication	Multifunction Communication	Multifunction Communication
	System; attaches to	System; attaches to	System; attaches to	System; attaches to	System; attaches to
	6544 controller;	6544 controller;	6544 controller;	6544 controller;	6544 controller;
	controller price highly dependent on	controller price highly dependent on	controller price highly dependent on	multitasking display; programmed	multitasking display; programme
	options selected	options selected	options selected	symbols	symbols
	25.0.00000			-,	-,20.0
	.1	<u> </u>	.l	L	<u> </u>

Standslone Cluster Standslone Cluster	Standalone Cubater C	VENDOR AND MODEL	Beehive ATL-3270	Beehive ATL-3270MS	Beehive ATL-078	Beehive ATL-178	Beehive ATL-004
Standalone Cutater Standalone Cutater Standalone Cutater Standalone Cutater Standalone Cutater Standalone Cutater Cutate	Standalone Cubater C	ERMINAL DESCRIPTION					
No	No	standalone or cluster	Standalone	Cluster	Standalone	Cluster	Standalone
M. compatibility	M. compatibility		<u> </u>	5	8	32	-
No	No						
their competibility pack PARAMETERS sipply capacity, no. of char, sime pack pack pack pack pack pack pack pack	their compatibility spily regardity. No. of char. spily agadety, no. of char. spily agadety, no. of char. spiles yeaped the foreign of the spiles of the spi						
	AMSI X3 64 AMS		No	No		No	
### ### ### ### ### ### ### ### ### ##	### 1920 1920	ther compatibility	<u> </u>		Beehive DM5A	<u> </u>	
1920 1920	1920				İ	1	ANSI X3.64
1920/24/1 2486 plus status	1920/24/1 2480 plus status		1000	1000	1020	1020	2160 2564
24/88 plus status 24/8	24-88 plus status 24-8						
Inno	Inna					24×80 plus etatus	
14 14 14 15 15 15 15 15	14	creen arrangement, inles x char./inle					27,000/132
		creen area (diagonal) inches					14
128 EBCDIC 128	128 EBCDIC 128						
\$\frac{1}{3}\$ (all prints)	\$\frac{1}{3} \text{ cell printer} \$\frac{1}{3} cell pri						
P31 green or amber P31 gre	P31 green or amber P31 gre		9x13 cell	9x13 cell	9x13 cell	9x13 cell	9x13 cell
No	No		P31 green or amber	P31 green or amber	P31 green	P31 green or amber	P31 green or ambe
No	No		ł -			_	
Std. Std.	Std. Std.						
Uniderline Std. S	Uniderline Stid.		No	No	No	No	No
Blink Blink Stid. Stid	Blink Blink Std.		ام. ا	l _{0.1}	lo. 1	0.4	0.1
Blank Biold Stid. Stid	Blank Std.						
Std. Std.	Std. Std.						
Std. Std.	Std. Std.						
No	No						
No	No						
1 std. 1 std. 1 std. 1 std. 3 std. 5	1 std. 1 std. 1 std. 1 std. 3 std. 5						
siectable cursor blinking didressable/readable cursor blinking didressable cursor blinking	siectable cursor blinking didressable/readable cursor blinking didressable cursor blinking						
ddressable/readable cursor rotected format Std. Std.	ddressable/readable cursor rotected format Std. Std.						
Std. Std. Std. Std. Std. Std. Std. Std.	Std. Std. Std. Std. Std. Std. Std. Std.						
Diff screen/windows abbulation baracter insert/delete ne	Diff screen/windows abbulation baracter insert/delete ne			Std.			
abulation manacter insert/delete ne insert/delete Std. No No Screen/char./field std. Std. No Char./screen/field std. Std. Std. No Char./screen/field std. Std. Std. Std. Std. Std. Std. Std. S	abulation maracter insert/delete ne insert/delete Std. No No Screen/char./field std. Std. No Char./screen/field std. Std. Std. No Char./screen/field std. Std. Std. Std. Std. Std. Std. Std. S	artial screen transmit	Std.	Std.	Std.	Std.	Std.
Std. No Char./screen/field std. No Char./screen/field std. No Char./screen/field std. No Char./screen/field std. No Char./screen/field std. No Char./screen/field std. No Char./screen/field std. No Char./screen/field std. Std. No Char./screen/field std. Std. No Char./screen/field std. Std. Std. No Char./screen/field std. Std. Std. Std. Std. Std. Std. Std. S	Std. No Char./screen/field std. No Char./screen/field std. Std. No Char./screen/field std. Std. No Char./screen/field std. Std. Std. No Char./screen/field std. Std. Std. No Char./screen/field std. Std. Std. No Char./screen/field std. Std. Std. Std. Std. Std. Std. Std. S	plit screen/windows		No	No	No	
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Block Std. Std. Std. Std. Std. Std. Std. Std.	Block Std. Std. Std. Std. Std. Std. Std. Std.					Up to 19,200	
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isplay units installed to date erviced by Beehive & Western Union Supports serial ASCII printer Beehive & Western Union Designed to emulate IBM 3276 Beehive & Western Union Designed to emulate IBM 3278 when used with CC74 controller on reduced function w/	isplay units installed to date erviced by Beehive & Western Union Supports serial ASCII printer Beehive & Western Union Designed to emulate IBM 3276 Beehive & Western Union Designed to emulate IBM 3278 when used with CC74 controller on reduced function w/						
Beehive & Western Union Union Beehive & Western Union Beehive & Western Union Union Beehive & Western Union	Beehive & Western Union		5/04	10/04	7/02	10/04	12/03
Union Supports serial ASCII printer Union Designed to emulate IBM 3276 Union Designed to emulate IBM 3278 Union Designed to emulate IBM 3278 Union Designed to emulate IBM 3178 Capability for 132-when used with CC74 controller on reduced function w/	Union Supports serial ASCII printer IBM 3276 Union Designed to emulate IBM 3278 Union Designed to emulate IBM 3278 When used with CC74 controller on reduced function w/		Rechive & Western	Rechive & Mostorn	Rechive & Mostorn	Rechive & Mostorn	Rechive & Moston
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CC74 controller on reduced function w/	CC74 controller on reduced function w/		, son printer				
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### ATT-036 ##		Beehive	Beehive	Beehive	Braegen	Braegen
Standdione Standdione Cluster	VENDOR AND MODEL					
Machimum displays/controller Responsibility No		Consideration of	Consideration of	Chandalana	Channe	Charter
Transportability Mo compatibility Differ compatibil		Standalone	Standalone	Standalone		
Bild compatibility		No	No	No		
Decompassibility Burroughs TD 830 MT 983 VTS2 VT						
SEALY PARAMETERS Mrs. 983 VFS2 ASSI X3.64 SEALY SE					No	No
	Other compatibility					-
24x80 24x8						
14						
Tityles/weis/screen		[1	
128 ASCII 336 EBCDIC 747 dot matrix 731 green 749 dot matrix 731 green 749 dot matrix 731 green 749 dot matrix 731 green 749 dot matrix 731 green 740 dot matrix 741						
Symbol formation						
No						7x10 dot matrix
No	Character phosphor	P31 green	P31 green or amber	P31 green	P109 std.	P109 std.
No	Color capability	No	No	No	No	No
Programmable field/char. highlighting vis: Underfine Std. St	Graphics					
Blink Std.	Programmable field/char. highlighting via:			ļ		
Blank Std.						
Std. Std.						
Double size Size No Std. Std. Std. No No No No No Size Size Size No No No No No No No N	Bold	Std.	Std.	Std.	Std.	Std.
No						
A std., 9 opt. Std.						
Side Side				12 std.		
Std. Std.	Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Std. Std. Std. Std. Std. Std. Opt.						
Split screen/windows Tabulation Std. Std. No Fwd./back std. Std. Std. Std. Std. Std. Std. Std. S						
Std. Fwd. / Jack std. St			No			
Line insert/delete Erase Frase Page/line/screen std. Std. Frascer Character Code set Detachability Std. Std. Std. Std. Std. Std. Std. Std.	Tabulation	Std.	Fwd./back std.	Fwd./back std.	Std.	Std.
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Std. Std.						Char./line/screen
Style						
ASCII Std. ASCII Std.		D. TD 000	T	Tomanous	T a	Tomassina
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Detachability Program function keys 16 std. 19 std. 19 std. 24 std. 24 std. 24 std. 24 std. 24 std. 24 std. 24 std. 24 std. 24 std. 24 std. 24 std. 27 pt. 200/50 cps 200/50 cps 400, 1200 lpm No No No No No No No No No No No No No	Character/code set	ASCII		ASCII	EBCDIC	EBCDIC
Numeric keypad NCILLARY DEVICES OCHAPTION Type, and speed Composite video Port for custsupplied devices Other vendor-supplied devices Half/full-duplex Async./sync. Burroughs TDI ASCII Format Multipoint operation Terminal interface Integral modem Integral modem Integral modem Integral modem Integral modem Integral modem Integral modem Integral modem Integral modem Integral modem Integral modem Integral modem Integral moder Integral Moder Integral Moder Integral Moder Integral Moder Integral Mod	Detachability	Std.	Std.	Std.	Std.	Std.
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NOLLARY DEVICES Serial printer, type, and speed Line printer, type, and speed Line printer, type, and speed Line printer, type, and speed Line printer, type, and speed Line printer, type, and speed Composite video Port for custsupplied devices Other vendor-supplied devices RANSMISSION PARAMETERS Mode Technique Communications protocol Code Code Conduction devices Communications protocol Code Code Communications protocol Code Communications Communications Communications Communications Communications Communications Communications Communications Communications Communications Communications Communications Communications	Numeric keypad	Std.	Std.	Std.	Opt.	Opt.
Line printer, type, and speed Composite video Port for custsupplied devices Other vendor-supplied devices Other vendor-supplied devices Half/full-duplex Async./sync. Burroughs TDI ASCII Std. — Half/full-duplex Asynchronous Ascil Bobley Iuro 1.5M Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 Do 1.190 D	NCILLARY DEVICES			l	1	· ·
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Port for custsupplied devices Other vendor-supplied devices Other vendor-supplied devices Std	Line printer, type, and speed					
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Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS Display tation, purchase Contact vendor		INO	INO	INO	INO	INO
Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS Designed to emulate Burroughs TD 830 & MT 983 MT 983	Display station, purchase	Contact vendor	895	Contact vendor	Contact vendor	Contact vendor
Annual prime-shift maintenance Date of announcement 4/82 Display units installed to date Serviced by OMMENTS Display in the production delivery Display units installed to date Serviced by OMMENTS Designed to emulate Burroughs TD 830 & MT 983 MT 983 Description Designed to emulate Burroughs TD 830 & MT 983 Description Designed to emulate Burroughs TD 830 & MT 983 Description Designed to emulate Burroughs TD 830 & MT 983 Description Designed to emulate Burroughs TD 830 & MT 983 Description Designed to emulate Burroughs TD 830 & MT 983 Description Designed to emulate Burroughs TD 830 & MT 983 Description Designed to emulate Burroughs TD 830 & MT 983 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852 Same as 852	Controller, purchase				-	
Date of announcement Date of first production delivery Date of first production delivery Display units installed to date Serviced by OMMENTS 4/82 5/82 12/85 12/83 11/83 1						
Date of first production delivery Display units installed to date Serviced by OMMENTS Designed to emulate Burroughs TD 830 & MT 983 MT 983 Designed to emulate Burroughs TD 830 & MT 983 Designed to emulate Beehive & Western Union Vertical scrolling ablity for 132-character display mode; horizontal scrolling abl		4/82	12/85	11/82	8/83	8/83
Display units installed to date Serviced by OMMENTS Behive & Western Union Designed to emulate Burroughs TD 830 & MT 983 MT 983 Display mode display mode display mode Display units installed to date Beehive & Western Union Vertical scrolling ability for 132-character display mode; horizontal scrolling; windowing display mode display mode display mode display mode display mode; horizontal scrolling; windowing als to communicate on one physical coax cable; may be conn-	Date of first production delivery		12/85			
Union Designed to emulate Burroughs TD 830 & MT 983 MT 983 Union Union Union Vertical scrolling ability for replace channel connected IBM 3274; allows up to 60 3278 replacement terminals to communicate on one physical coax cable; may be connected in the conne	Display units installed to date	-	200+		<u> </u>	<u> </u>
OMMENTS Designed to emulate Burroughs TD 830 & MT 983 MT 983 display mode display mode display mode display mode display mode display mode ing; windowing B52X displays replace channel connected IBM 3274; allows up to 60 3278 replacement termin- als to communicate on one physical coax cable; may be conn-	Serviced by				Braegen	Braegen
Burroughs TD 830 & MT 983 MT 983 display mode display mode; horizontal scrolling; windowing last to communicate on one physical coax cable; may be connected.	OMMENTS		Union		852X displays	Same as 8521
MT 983 display mode display mode display mode; horizontal scroll- ing; windowing display mode; horizontal scroll- ing; windowing als to communicate on one physical coax cable; may be conn-	E1110	Burroughs TD 830 &			replace channel	3021
horizontal scroll-replacement termin- ing; windowing als to communicate on one physical coax cable; may be conn-				132-character	connected IBM 3274;	
ing; windowing als to communicate on one physical coax cable; may be conn-			display mode			1
on one physical coax cable; may be conn-						
cable; may be conn-					on one physical coax	1
I I lected to up to 4					cable; may be conn-	
local hosts					ected to up to 4	1

VENDOR AND MODEL	Braegen 8523	Braegen 8524	Braegen 3081	Braegen 3161	Burroughs ET 1100
ERMINAL DESCRIPTION					
Standalone or cluster	Cluster	Cluster	Cluster	Cluster	Standalone
Maximum displays/controller	120	120	32	32	-
Transportability	No 3278	No 3180	No 3270, 1403, 2501	No 3270	No No
IBM compatibility Teletype compatibility	No	No	3270, 1403, 2501 No	No	Std.
Other compatibility					Burroughs
•					
ISPLAY PARAMETERS Display capacity, no. of char.	1920	1920 to 3564	2000	2000	2080
Memory capacity, no. of char.	1 page	1 page	1 page	1 page	10 pages
Screen arrangement, lines x char./line	24x80	24/32/43x80, 27x132		25x80	12/24x40/80 plus
Screen arrangement, intes x char./inte	24,00	24/02/40000, 270102		25,00	2 status lines
Screen area (diagonal), inches	15	15	12	15	14
Tilt/swivel screen	Std.	Std.	No	No	Std.
Total displayable symbols	136 EBCDIC	<u> </u>	196	196	256
Symbol formation	7x10/7x8 dot matrix	7x10 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix
Character phosphor	P109 std.	P109 green	P31 green	P31 green	P39 green
Color capability	No	No	No	No	No
Graphics	No	No	No	No	No
Programmable field/char. highlighting via:	L .	 	١		1 .
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std. Std.	Std. Std.	Std.
Bold Reverse	Std.	Std. No	Sta. Opt.	Opt.	Std. Std.
Double size	No	No No	No	No	Std.
Scroll	No	Opt.	Opt.	Opt.	Std.
Paging	Opt.	1 std.	Opt.	Opt.	Std.
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Std.	Std.	Std.	Std.	Std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows	Opt.	No	No	No	No
Tabulation	Std.	Std.	Std.	Std.	Std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Opt.	Opt. Char./field/screen	Std.
Erase	Char./line/screen	Char./line/screen	Char./field/screen	std.	Line/page std.
EYBOARD PARAMETERS	Join.	otu.	Join.	Juliu.	
Style	Typewriter, data	Typewriter, data	Typewriter, data	Typewriter, data	Typewriter
0.1,10	entry, APL	entry, APL	entry, console	entry, APL	. 7000011101
Character/code set	EBCDIC	96 EBCDIC	256 EBCDIC	256 EBCDIC	128 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	24 std.	24 std.	12 std; 24 opt.	12 std.; 24 opt.	10 physical/20
,			-		logical
Numeric keypad	Opt.	Opt.	Opt.	Std.	Std.; 25-key opt.
NCILLARY DEVICES	1000/50	200 /50	l., .	l., .	
Serial printer, type, and speed	200/50 cps 400, 1200 lpm	200/50 cps	Various	Various	Std.
Line printer, type, and speed Composite video	No 1200 ipm	600, 1200 lpm No	Various No	Various No	No No
Port for custsupplied devices	No	No	No	No	Std.
Other vendor-supplied devices	Light pen opt.	Light pen opt.	Alarm, card reader	Alarm, card reader	Audible alarm
Other Verider Supplied devices	Light poir opt.	Light poil opt.	, warm, cara roador	, marrin, dara roddor	, tudibio diami
RANSMISSION PARAMETERS					1
Mode	Full-duplex	Full-duplex	Half-duplex	Half-duplex	Half-duplex
Technique	Synchronous	Synchronous	Synchronous	Synchronous	Async./sync.
Communications protocol	BSC, SNA/SDLC	BSC, SNA/SDLC	BSC	BSC	Burroughs
Code	EBCDIC	EBCDIC	EBCDIC	EBCDIC	ASCII
Speed, bits/second	Up to 1.5M	Up to 1.5M	1200-19,200	1200-19,200	Up to 38,400
Format	<u> - </u>	-	Char./block	Char./block	Char./block
Multipoint operation	Std.	Std.	Std.	Std.	Std.
Terminal interface	Coaxial	Coaxial	Coaxial	Coaxial	RS-232-C, TDI,
Integral modern	No	No	No	No	BDAA No
Integral modem Integral acoustic coupler	No No	No No	No	No	No
RICING AND AVAILABILITY	100			1.10	1.10
Display station, purchase	Contact vendor	Contact vendor	Contact vendor	Contact vendor	1,580
Controller, purchase		_			_
Monthly prime-shift maintenance	I—		_		20.33
Annual prime-shift maintenance			_		126-252
Date of announcement	8/83	6/84	_		4/83
Date of first production delivery	11/83		_	3/80	5/83
Display units installed to date	<u>-</u>				
Serviced by	Braegen	Braegen	Braegen	Braegen	Burroughs
OMMENTS	Samo as 9521	Part of ELAM ava	May be connected	May be connected	1.
OMMENTS	Same as 8521	Part of ELAN sys.; switchable between	May be connected to up to 8 IBM	May be connected to up to 8 IBM	
	1	screen formats; up	hosts, local & re-	hosts, local & re-	
		to 60 8524 displays	mote, and switched	mote, and switched	
		can communicate via	to operate with 14	to operate with 14	
		one physical coax	different applica-	different applica-	
	1	cable of up to	tions	tions; APL support	
			tions	lions, Ar L support	
		10,000 feet	tions	tions, Ar E support	

VENDOR AND MODEL	Burroughs PT 1500	C&W Distribution Products TP-1	C&W Distribution Products TP-100	C&W Distribution Products TP-900	Carterfone 7276
ERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller		l—	<u> </u>	 	_
Transportability	No	No	No	No	No
BM compatibility	No	No	No	No	3276
Teletype compatibility	Std. DEC	Std.	Std.	Std.	No
Other compatibility	DEC	ADDS Viewpoint, Lear Siegler ADM 3A	DEC VT100/VT131/ VT52	TeleVideo 912/920/ 925	
ISPLAY PARAMETERS		Lear Siegler Abivi 3A	V132	1929	
Display capacity, no. of char.	2320	1920	1920, 3168	2000	1920
Memory capacity, no. char./lines/pages	4 pages	80/24/1	80 or 132/24/1	80/24/2	_
Screen arrangement, lines x char./line	29x80	24x80	24x80/132	25x80	24x80 plus status
2	10	1.0	1.0	140	line
Screen area (diagonal), inches Tilt/swivel screen	12 Std.	12 Std.	12 Std.	12 Std.	12 No
Total displayable symbols	480	128 ASCII	128 ASCII	128 ASCII	94 EBCDIC
Symbol formation	9x12 cell	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix
Character phosphor	P31 green	P31 green std.	P31 green std.	P31 green std.	P4 white
·					1
Color capability	No	No	No	No	No
Graphics	No	Line drawing std.	Line drawing std.	No	-
Programmable field/char. highlighting via: Underline	Std.	Std.	Std.	Std.	No
Blink	Std.	Std.	Std.	Std.	No No
Blank	Std.	Std.	Std.	Std.	Std.
Bold	No	Std.	Std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	No
Double size	No	No	Std.	Std.	No
Scroll	Up/down std.	Up std.	Up/down, jump/smth.	Up/down, jump/smth.	No
Paging	Application dep.	No	No	2 std.	No
Selectable cursor blinking	Application dep.	Std.	Std.	Std.	Std.
Addressable/readable cursor	No Application dan	Addressable only	Both std.	Both std.	Both std.
Protected format Partial screen transmit	Application dep.	Std.	Std. Std.	Std. Std.	Std.
Partial screen transmit Split screen/windows	Std.	No No	3 std.	3 std.	No
Tabulation	Std.	Fwd. std.	Fwd./back std.		Fwd./back std.
Character insert/delete	Std.	No	Delete std.	Std.	Std.
Line insert/delete	Std.	No	Std.	Std.	No
Erase	Std.	Char./line/screen	Char./line/screen/	Char./line/screen/	Field/screen std.
TVDO ADD DADA		std.	window std.	window std.	
EYBOARD PARAMETERS	T	Turnamentar	T. m. a mia a w	T. marraitan	Tiail - a
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter, data
Character/code set	ASCII	ASCII	ASCII	ASCII	entry 94 EBCDIC
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	10 std.	4 programmable	4 fixed, 10 pro-	22 programmable	24 std.
		. p. 25. arriniable	grammable		
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES					
Serial printer, type, and speed	Various	110-19.2K bps	75-19.2K bps	50-19.2K bps	32/120 cps impac
Line printer, type, and speed	No	110-19.2K bps	75-19.2K bps	50-19.2K bps	No
Composite video Port for custsupplied devices	No Std.	No Serial std.	Std. Serial/parallel	No Serial std.	No Std.
Other vendor-supplied devices	Sid.	Serial Std.	Serial/parallel	Senai std.	3id.
other vendor supplied devices					
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Synchronous
Communications protocol	ASCII	ASCII	ASCII ASCII	ASCII	BSC, SNA/SDLC
Code Speed, bits/second	ASCII Up to 19,200/307K	ASCII 110-19,200	75-19,200	ASCII 50-19,200	EBCDIC 2400-9600
Speed, bits/second Format	Char./line/block	Character	Char./line/block	Char./line/block	Block
Multipoint operation		No	No	No	Std.
Terminal interface	RS-232-C or RS-422	RS-232-C	RS-232-C or 20mA	RS-232-C, 20mA, or	RS-232-C
				RS-422	
Integral modem	No	No	No	No	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY	1 400	FOE	705	COE	2.405
Display station, purchase	1,400	595	795	695	2,495
Controller, purchase Monthly prime-shift maintenance	14				30
Annual prime-shift maintenance	168	30/15	50/15	40/15	30
Date of announcement	10/84	2/84	12/84	2/84	1/82
Date of first production delivery	10/84	5/84	6/84	6/84	1-/02
Display units installed to date		<u> -</u>	1	- '- '	
Serviced by	Burroughs	Carterfone	Carterfone	Carterfone	Carterfone
ONANACNITO	Do muino o constituido de la constituida del constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la constituida de la con	Maniana mai de la d	Manifest man de la contra	Manifestor and Control	
OMMENTS	Requires use of	Monitor mode std.;	Monitor mode std.;	Monitor mode std.;	
	UNIX system	U.S./U.K./French/	English language	English language	
		German character sets std.	set-up menu	set-up menu	
		Seta atd.			
		1			
	i	I	1	1	1
					i

	T				T
VENDOR AND MODEL	Carterfone 9830	Chi MP-1 Terminal	CIE Systems CIE-7800	CIE Systems CIE-7100	CIE Terminals CIT-80
TERMINAL DESCRIPTION Standalone or cluster	Standalone	Both	Either	Standalone	Standalone
Maximum displays/controller					
Transportability IBM compatibility	No No	No 3276 BSC	No 3178/3278	No 3101	No No
Teletype compatibility	Std.	Std.	Opt.	Std.	Std.
Other compatibility	Burroughs TD 830/ MT 983	Sperry UTS 20/40/ 400, DEC VT100	DEC VT100, Burr- oughs	DEC VT100, HP 2622A	DEC VT52/VT101
DISPLAY PARAMETERS	IVI 903	400, DEC V1100	ougns	2022A	
Display capacity, no. of char.	480, 960, 1920	3192	1920, 3564	2000, 3300	1920
Memory capacity, no. char./lines/pages	4000 std., 4000 opt.	64K	1 page	1 page 25x80/132	80/24/1 25x80
Screen arrangement, lines x char./line	12/24x40/80	24x133 (user- selectable)	24/32/43x80, 27x132	2500/132	25x8U
Screen area (diagonal), inches	12	14	14	14	12
Tilt/swivel screen Total displayable symbols	No 128 ASCII	Std. 128	Tilt std. 96 ASCII, EBCDIC	Tilt std. 96 ASCII	No 128 ASCII
Symbol formation	9x12 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix
Character phosphor	P31 green	P31 green std.;	P31 green, amber	P31 green, amber	P4 white std.; P31
Colon constiller	NI -	amber opt.	Na	N-	green, amber opt.
Color capability Graphics	No No	No No	No No	No No	No No
Programmable field/char. highlighting via:	1				
Underline	Std.	Std.	Std.	Std.	Std.
Blink Blank	Std. Std.	Std.	Std.	Std. Std.	Std. Std.
Bold	Std.	Std.	Std.	Std.	Std.
Reverse Double size	Std.	Std.	Std.	Std. Std.	Std. No
Scroll	No Std.	No Up/down	Up/down, smooth	Up/down, smooth	Up/down, jump/sm
Paging	3 std.	No	No	No	No
Selectable cursor blinking	Std.	Std.	Std. Addressable std.	Std. Addressable std.	Std. Both std.
Addressable/readable cursor Protected format	Both std. Std.	Both std. Std.	Std.	Std.	No
Partial screen transmit	Std.	Std.	Std.	Std.	No
Split screen/windows	No	No	No	No	3 std.
Tabulation Character insert/delete	Fwd./back std. Std.	Fwd./back std. Std.	Std.	Std. Std.	Fwd./back std. No
Line insert/delete	Std.	Std.	Std.	Std.	No
Erase	Line/page std.	Std.	Char./line/screen	Char./line/screen std.	Line/screen/char./ window std.
KEYBOARD PARAMETERS Style	Typewriter	Typewriter (PC)	Typewriter	Typewriter	Typewriter
•	1	1	1 "	1	1 "
Character/code set Detachability	128 ASCII Std.	ASCII Std.	96 ASCII, 128 EBCDIC Std.	96 ASCII Std.	128 ASCII Std.
Program function keys	Prog.	32 std.	24 std.	24 std.	16 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
ANCILLARY DEVICES	Stu.		1	Siu.	
Serial printer, type, and speed	No	9600 bps serial	No No	No No	50-19.2K bps 50-19.2K bps
Line printer, type, and speed Composite video	No No	All parallel prtr.	No	No	No
Port for custsupplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices		OCR & bar code reader	No	No	
TRANSMISSION PARAMETERS Mode	Half/full-duplex	Full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Async./sync.	Sync./async.	Async./sync.	Asynchronous	Asynchronous
Communications protocol Code	Burr. TDI, TTY ASCII	Uniscope/BSC ASCII/EBCDIC	Bisynch SDLC ASCII, EBCDIC	ASCII ASCII	ANSI/ASCII ASCII
Speed, bits/second	Up to 9600	50-19,200	110-19,200	110-19,200	Up to 19,200
Format	Char./block	Block	Character	Char./block	Char./line/block
Multipoint operation Terminal interface	Std. RS-232-C	Std. RS-232-C, Sperry	Std. RS-232-C, coaxial	Std. RS-232-C	No RS-232-C or 20mA
Tominal interiole	110-202-0	mux	110-202-0, COAXIAI	110-202-0	110-202-0 01 20ITA
Integral modem	No	No	No	No	No
Integral acoustic coupler PRICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	1,195	1,250	1,275-2,345	695	1,195
Controller, purchase			_	-	-
Monthly prime-shift maintenance Annual prime-shift maintenance		30 (dep. on qty.) 300 (dep. on qty.)			_
Date of announcement	1/82	4/85	5/83	11/84	6/81
Date of first production delivery	8/82	5/85	11/83	11/84	9/81
Display units installed to date Serviced by	Carterfone	100 TRW	Selling party	Selling party	Western Union/CIE
•				1	Terminals
COMMENTS		Multiple protocols	May be ordered with	May be ordered with	Lease plans avail-
		available; IBM 3270 & DEC VT100 emu-	alternate person- ality, dual net-	alternate person- ality, dual net-	able from authorize distributors
		lation available	working available;	working available;	
		3/86; programmable	sold thru ACM	sold thru ACM	
		function keys; cursor pad; intell-	(Alernate Channel Marketing)	(Alernate Channel Marketing)	
		igent modem control	187	187	

VENDOR AND MODEL	CIE Terminals CIT-101	CIE Terminals CIT-101e	CIE Terminals CIT-161	CIE Terminals CIT-220+	CIE Terminals CIT-500
RMINAL DESCRIPTION					
tandalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
flaximum displays/controller ransportability	No	No	No	No	No
BM compatibility	No .	No	No	No	No
eletype compatibility	Std.	Std.	Std.	No	Std.
Other compatibility	DEC VT52/VT100/ VT101/VT102	DEC VT52/VT100/ VT101/VT102	DEC VT100/VT52	DEC VT220/VT100/ VT52	DEC VT100, ANSI X3.64
SPLAY PARAMETERS	V1101/V1102	V 101/V1102		V 132	7.5.04
isplay capacity, no. of char.	1920, 3168	1920, 3168	1920, 3168	1920, 3168	5120
femory capacity, no. char./lines/pages creen arrangement, lines x char./line	80 or 132/24/1 24x80/132	80 or 132/24/1 24/132x80		1 page 24x80/132	66x80
creen anangement, mes x char, me	1	24/132860	24x60/132	24,00/132	Jooxeo
creen area (diagonal), inches	12	14	12	12	15 (vertical)
ilt/swivel screen otal displayable symbols	No 128 ASCII	Std. 96 ASCII	No 128 ASCII	Tilt std. 94 ASCII	Std. 256
vmbol formation	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix	7x10 dot matrix	7x9 dot matrix
haracter phosphor	P4 white std.; P31	P4 white std.;	Color	P4 white std.; P31	P39 green
talan anala Wasa	green/amber opt.	green/amber opt.		grn., P22 amber opt	
olor capability Traphics	No Opt.	No No	8 colors std. No	No No	No No
rogrammable field/char. highlighting via:	·				
Underline	Std.	Std.	Std.	Std.	Std.
Blink Blank	Std.	Std.	Std. Std.	Std.	Std.
Biank Bold	Std.	No Std.	Std. No	Std. Std.	No Std.
Reverse	Std.	Std.	No	Std.	Std.
Double size	Std.	No	Std.	Std.	No
croll aging	Up/down, jump/smth.	Std.	Std. No	Up/down/jump/smth.	Std.
aging electable cursor blinking	No Std.	No Std.	No Std.	Std.	No Std.
ddressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Both std.
rotected format	No	No	No	No	No
artial screen transmit plit screen/windows	No 3 std.	No 3 std.	No 3 std.	No 2 std.	No No
abulation	Fwd./back std.	Fwd./back std.	Std.	Forward	Std.
haracter insert/delete	No	No	No	Std.	Std.
ine insert/delete	No	No	No	No	Std.
rase	Line/screen/char./ window std.	Line/screen/char./ window	Std.	Char./line/screen/ window std.	Std.
YBOARD PARAMETERS	Williadow Sta.	Willidow		Wildow Std.	
ityle	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
harrantan (aa da aat	128 ASCII	96 ASCII	120 4001	04 40011	A CCII
haracter/code set etachability	Std.	Std.	128 ASCII Std.	94 ASCII Std.	ASCII Std.
rogram function keys	16 std.	4 std.	4 std.	15 std. NVR	4 std.; up to 41
	L .				programmable
lumeric keypad ICILLARY DEVICES	Std.	Std.	Std.	Std.; hex alternate	Std.
erial printer, type, and speed	50-19.2K bps	50-19.2K bps	50-19.2K bps	75-19.2K bps	50-19.2K bps
ine printer, type, and speed	50-19.2K bps	50-19.2K bps	50-19.2K bps	75-19.2K bps	50-19.2K bps
composite video	No	No	No	Opt.	No
ort for custsupplied devices other vendor-supplied devices	Std.	Std.	Std.	Std.	Std.
ANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
echnique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
communications protocol code	ANSI/ASCII ASCII	ANSI/ASCII ASCII	ASCII/ANSI ASCII	ASCII/ANSI X3.64 ASCII	ASCII/ANSI X3.64 ASCII
peed, bits/second	Up to 19,200	50-19,200	50-19,200	75-19,200	50-19,200
ormat	Character	Character	Character	Character	Character
fultipoint operation erminal interface	No BC 222 C or 20m A	No BS 222 C or 20mA	No BS 222 C or 20m A	No BC 222 C or 20mA	No RS-232-C or 20m/
ентина! Interrace	RS-232-C or 20mA	RS-232-C or 20mA	RS-232-C or 20mA	RS-232-C or 20mA	no-232-0 or 20m/
ntegral modem	No	No	No	No	No
ntegral acoustic coupler	No	No	No	No	No
ICING AND AVAILABILITY isplay station, purchase	1,495	1,495	2,595	1,195	2,150
ontroller, purchase					
Nonthly prime-shift maintenance	 -	-			
annual prime-shift maintenance	6.00	E /02	6.193	6.04	
late of announcement late of first production delivery	6/80 12/80	5/83 3Q/83	6/83 30/82	6/84 7/84	
hisplay units installed to date		-		<u> </u>	_
erviced by	Western Union/CIE	CIE Terminals	Western Union/CIE	CIE Terminals	CIE Terminals
DMMENTS	Terminals		Terminals		Full page word
O I PIZIVHVIC	Lease plans avail- able from authorized				Full-page word processing termina
	distributors. Gra-				compatible with
	phics, power supply				Word 11, Lex 11,
	and other expansion				WordStar software
	options available				
	1	,	1	i	1
			ł	i	1

VENDOR AND MODEL	Computer Communications (CCI) 8178	Comterm 5178	Comterm 5278	Comterm 5278 (All-in-One)	Concurrent Computer (Perkin-Elmer Model 6100
ERMINAL DESCRIPTION					
Standalone or cluster	Cluster	Cluster	Cluster	Cluster	Standalone
Maximum displays/controller	Up to 40	32	32	32	l
Transportability IBM compatibility	No 3270	No 3178	No 3278	No 3278	No No
Teletype compatibility	No	No	No	No	Std.
Other compatibility		_		_	<u>-</u>
ISPLAY PARAMETERS					
Display capacity, no. of char.	1920	1920	1920-3440	1920-3564	1920
Memory capacity, no. char./lines/pages	I—		_		_
Screen arrangement, lines x char./line	24x80 plus status	24x80	24/32/43x80	24/32/43x80, 27x132	24x80
Screen area (diagonal), inches	line 12	12	15	15	12
Tilt/swivel screen	Std.	Std.	Std.	Std.	Std.
Total displayable symbols	128 ASCII	94	94	94	128 ASCII
Symbol formation	7x12 dot matrix	Dot matrix	Dot matrix	Dot matrix P39 green	7x9 dot matrix
Character phosphor	P31 green	P39 green	P39 green	ros green	P31 green or P134 amber
Color capability	No	No	No	No	No
Graphics	No	No	No	No	96 char. std.
Programmable field/char. highlighting via: Underline	Std.	Std.	Std.	Std.	No
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold	Std.	Std.	Std.	Std.	No
Reverse	Std.	Std.	Std. No	Std.	Std.
Double size Scroll	No No	No No	No No	No No	No Up, smooth (opt.)
Paging	No	No	No	No	1 std.
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Std.	Addressable only	Addressable only	Addressable only	Std.
Protected format	Std. Std.	Std. Std.	Std. Std.	Std. Std.	No No
Partial screen transmit Split screen/windows	No	No	No	No	No
Tabulation	Std.	Std.	Std.	Std.	Std.
Character insert/delete	Std.	Std.	Std.	Std.	No
Line insert/delete	No	No	No	No	No
Erase	Char./line/screen std.	Char./line/screen	Char./line/screen	Char./line/screen	Line/page std.
EYBOARD PARAMETERS					j
Style	IBM 3278-style	Typewriter (English	Typewriter (English	Typewriter (English	Typewriter
Character/cada act	128 ASCII	& French) EBCDIC	& French) EBCDIC	& French) EBCDIC	128 ASCII
Character/code set Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	24 std.	12 std.	12 std.	12 std.	4 std. (8 func-
					tions)
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES Serial printer, type, and speed	120 cps impact	200 cps dot matrix	200 cps dot matrix	200 cps dot matrix	No
Line printer, type, and speed	No	300 lpm band	300 lpm band	300 lpm band	No
Composite video	No	Opt.	Opt.	Opt.	No
Port for custsupplied devices Other vendor-supplied devices	Std.	Std.	Std. No	Std. No	Std.
Other Veridor-supplied devices			110		
			}		
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half-duplex	Half-duplex	Half-duplex	Half/full-duplex
Technique Communications protocol	Synchronous SNA/SDLC, BSC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Asynchronous
Communications protocol Code	EBCDIC	EBCDIC	EBCDIC	EBCDIC	ASCII
Speed, bits/second	1200-19,200M	1200-19,200	1200-19,200	1200-19,200	300-19,200
Format	Block	Block	Block	Block	Character
Multipoint operation	Std.	Std.	Std.	Std.	No RS-232-C std.; 20
Terminal interface	Coaxial	Coax Type A	Coax Type A	Coax Type A	mA opt.
Integral modem	No	No	No	No	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY	1,500	Contact vendor	Contact vendor	Contact vendor	950
Display station, purchase Controller, purchase	4,990-5,775	Contact vendor	Contact vendor	Contact vendor	_
Monthly prime-shift maintenance	12-25	Contact vendor	Contact vendor	Contact vendor	15
Annual prime-shift maintenance	144-300	Contact vendor	Contact vendor	Contact vendor	
Date of announcement	12/83	1983	1983	1983 1983	9/83
Date of first production delivery Display units installed to date	1/84	1983	1983		11/83
Serviced by	CCI	Comterm	Comterm	Comterm	Perkin-Elmer
·	D				1
OMMENTS	Part of Group 8000; connects to 8274 controller	Attaches to Comterm 6270 controller or IBM-compatible; French function	Attaches to Comterm 5270 and 6270 controllers, or IBM- compatible; French	Attaches to Comterm 6270 controller or IBM-compatible; French function	
		keys; choice of keyboard; antiglare filter	function keys; choice of keyboard	keys; choice of keyboard	

Maximum displays Controller Transportability Transportability Std. No	VENDOR AND MODEL	Concurrent Computer (Perkin-Elmer) Model 6312	Control Concepts EM-3275	Control Concepts EM-3276	Control Concepts CC-3276	Control Concept CC-3278
Standalone or cluster Standalone Stand	FRMINAL DESCRIPTION					
Maximum displayer Controller Target Part	Standalone or cluster	Standalone	Standalone	Standalone/cluster	Standalone/cluster	Standalone
Bill compatibility			L	1	1.	
Telletype compatibility Offen compatibility Of						
Colten compatibility						
SPILALY PARAMETERS 1920	Other compatibility		_			
1920 1920				:		
Memory opacity, no. char, /inexpages 24,880 plus status 24,880 plu		1020	1020	1020	1020	1020
Screen raregerrent, lines x char / line Screen raregerrent, lines x char / line Titl / avwel screen Total displayable symbols Symbol formation Total displayable symbols Total displayable symbols Symbol formation Total displayable symbols Total displayable symbols Symbol formation Total displayable symbols						
	Screen arrangement, lines x char./line					
Std. Std.	Commence Albania D. Santa	1.0				
Total displayable symbols 128 ASCII 28 EBCDIC 73 dot matrix 73 dot matrix 74 dot m				Swivel opt		
Symbol Formation 7,8d dot matrix Fig green or P134 Fig green Fig gre				96 EBCDIC		96 ASCII/IBM symbl
Color Capability	Symbol formation	7x9 dot matrix				7x8 dot matrix
No	Character phosphor		P42 green	P42 green	P42 green	P31 green
32 char. std. No	Color capability		No	No	No	No
Programmable field/char. highlighting via:						
Underfine Blank	Programmable field/char. highlighting via:	•	1			
Blank Blan	Underline					
Bold Reverse Std. No No No No No No No N						
Std. No						
Double size Scrol Up, smooth (opt.) No No No No No No No N	Reverse		No	No	No	Std.
Paging Salectable cursor blinking Std.	Double size	No	No	No	No	No
Selecitable cursor blinking Addressable preadable cursor Std. St	Scroll Paging					
Addressable/readable cursor Protected format Protected format Protected format Std. Std. Std. Std. Std. Std. Std. Std.						
Std. Std.						
No	Protected format	Std.	Std.	Std.		
Std. Std.						
Std. Std.						
Std. Std. Std. Std. Std. Char. / filed/screen std. Iline/screen std. Std. Char. / filed/screen std. Iline/screen std. St						
Std. Std.	Line insert/delete	Std.	Std.	Std.	Std.	Std.
Typewriter IBM 3278-style IBM 3278	Erase					line/screen std.
Typewriter BM 3278-style BEDDIC/ASCII Std. C4 std. C	YEVROARD PARAMETERS	std.	std.	std.	std.	
128 ASCII Std. 96 EBCDIC/ASCII Std. 24 std.	Style	Typewriter	IBM 3278-style	IBM 3278-style	IBM 3278-style	IBM 3278
Std. Std.		1	1.5.11 527 5 51,15			
Tegral modern Terminal interface Terminal prime-shift maintenance Date of first prouchase Controller, purchase Control Concepts, third party Control	Character/code set					
Numeric keypad NCILLARY DEVICES Std. NCILLARY DEVICES Std. No No No No Opt. Opt. Opt. Opt. Opt. Audible alarm Half-full-duplex Asynchronous Synchronous Synchro						
Numeric keypad NCILLARY DEVICES Serial printer, type, and speed Line printer, type, and speed Line printer, type, and speed Line printer, type, and speed Composite video Ont for cust-supplied devices Other vendor-supplied devices RANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Multipoint operation Terminal interface Integral moderm Integral moderm Integral acoustic coupler RICING AND AV ALLABILITY Display station, purchase Controller, purchas	rrogram function keys		24 Stu.	24 Stu.	24 Stu.	24 Std.
Serial printer, type, and speed Line printer, type, and speed Composite video Port for cust-supplied devices Other vendor-supplied devices Other vendor-supplied devices RANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Multipoint operation Terminal interface RS-232-C std.; 20 Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Annual prime-shift maintenance Annual prime-shift maintenance Annual prime-shift maintenance Annual prime-shift maintenance Date of fars the roduction delivery Display units installed to date Serviced by Mo No No No Opt. Opt. Opt. Opt. Opt. Opt. Opt. Opt	Numeric keypad		Std.	Std.	Std.	Std.
Line printer, type, and speed Composite video Port for custsupplied devices Other vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-s	ANCILLARY DEVICES					
Composite video Port for custsupplied devices Other vendor-supplied vendor-s	Serial printer, type, and speed					
Other vendor-supplied devices Other vendor-supplied ve						
RANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Format Multipoint operation Terminal interface Integral modem Integral acoustic coupler RICING AND AVALLABILITY Display station, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of far production delivery Display units installed to date OMMENTS Half-duplex Synchronous Synch	Port for custsupplied devices					
Mode Technique Asynchronous Synchronous SUC SDLC SS	Other vendor-supplied devices	-				
Mode Technique Asynchronous Synchronous SUC SDLC SS						
Mode Technique Asynchronous Synchronous SUC SDLC SS		İ				
Mode Technique Asynchronous Synchronous SUC SDLC SS	RANSMISSION PARAMETERS	1			,	1
Communications protocol Code Co	Mode					
ASCII Up to 9600 Up to 9600 Sol-19,200 Char./line/page/mes Std. RS-232-C Std.; 20 RS-232-C	Technique -	Asynchronous				Asynchronous
Speed, bits/second Speed, bits/second Speed, bits/second Speed, bits/second Speed, bits/second Speed, bits/second Speed, bits/second Std.		ASCII				BSC, SNA/SDLC
Char./line/page/mes Std.	Speed, bits/second			Up to 9600		
Multipoint operation Std. RS-232-C std.; 20 mA opt. Std., contention opt. RS-232-C Std. RS-232-C RS-232-C <td>Format</td> <td>Char./line/page/mes</td> <td>Block</td> <td>Block</td> <td>Block</td> <td>Char./block</td>	Format	Char./line/page/mes	Block	Block	Block	Char./block
Integral modem No No No No No No No N	Multipoint operation	Std.				No
Integral modem	i erminal interface		HS-232-C	HS-232-C	HS-232-C	HS-232-C or 20 mA
Integral acoustic coupler RICING AND AVAILABILITY	Integral modem		Opt. (2400/4800 hps)	Opt. (2400/4800 hps)	Opt. (2400/4800 hps)	Opt. (1200/2400)
RICIÑG AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Display units installed to date Serviced by OMMENTS 1,320 1,995-3,490 Included I	Integral acoustic coupler					
Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS Included 32 35 42 23 384 42 33 384 6/80 9/80 9/80 Over 1000 Control Concepts, third party Included Over 1000 Control Concepts, third party Included 15 42 23 384 49 0/80 0/80 0/80 0/80 0/81 0/81 0/81 0/81	PRICING AND AVAILABILITY	1			0.005 4.040	lana 4 "
Monthly prime-shift maintenance Annual prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS 32		1,320				990-1,495
Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS	Monthly prime-shift maintenance	18				23
Date of announcement 6/84 9/80	Annual prime-shift maintenance					230
Display units installed to date Serviced by OMMENTS Over 1000 Control Concepts, third party Over 1000 Control Concepts, third party Over 1000 Control Concepts, third party Interfaces to IBM 3270 IDS via prot-	Date of announcement			6/80		3/84
Serviced by Perkin-Elmer Control Concepts, third party Control Con		9/84				4/84
OMMENTS third party third party third party Interfaces to IBM 3270 IDS via prot-		Perkin-Flmer				Control Concents
OMMENTS Interfaces to IBM 3270 IDS via prot-		I SIKIII-LIIIIGI				Control Concepts
	COMMENTS			1		
Ocol converter				1 .	1	3270 IDS via prot-
		1				ocoi converter
		1			1	
			1.		1	
						1
		1				
			1	Ī	ļ	

VENDOR AND MODEL	Control Concepts CC-5251	Control Data Model 714	Control Data Model 721	Control Data Model 722-10	Control Data Model 722-30
ERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Either	Standalone	Standalone	Standalone
Maximum displays/controller Transportability	Yes	15 No	No	No	No
IBM compatibility	5251-11	No	3276 opt.	No	No
Teletype compatibility	Std.	No	Std.	Std.	Std.
Other compatibility	-		CDC 722	Control Data	CDC Advanced Mod
ISPLAY PARAMETERS					ADDS Viewpt., ANS
Display capacity, no. of char.	1920	1280, 1920	1920-3960	1920	1920
Memory capacity, no. char./lines/pages	2K	2560, 3940 char.			
Screen arrangement, lines x char./line	24x80 plus status	16/24x80	24/30x80, 24/30x132	24x80	24x80
Caraan area (diagonal) inchas	line 12	8x10	15	12	12
Screen area (diagonal), inches Tilt/swivel screen	Std.	No	Std.	No	Std.
Total displayable symbols	96 ASCII/IBM symbl.	96	96 ASCII	96 ASCII	128 ASCII
Symbol formation	7x8 dot matrix	5x9 dot matrix	8x16/5x16 dot matrix	8x10 dot matrix	7x9 in 10x12 cell
Character phosphor	P31 green	P4 white	P39 green	P4 white	P31 green
Calar aanahilitu	No	No	No	No	No
Color capability Graphics	No No	INO	Std. (721-31)	INO	31 special char.
Programmable field/char. highlighting via:			Std. (721-31)		or special char.
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	No	Std.	Std.	Std.
Blank	Std.	No	Std.	No	Std.
Bold Boyerse	Std.	No Std.	No Std.	Std. No	Std.
Reverse Double size	Std.	No.	No	No No	No
Scroll	No	No	Up std.	Up/down std.	Step std.
Paging	No	No	1 std.	1 std.	1 std.
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Addressable only
Protected format Partial screen transmit	Std. Std.	Std. Std.	Std. Std.	No Std.	Std. Std.
Split screen/windows	No	No.	No	No	No
Tabulation	Std.	Std.	Std.	Std.	Std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Line/screen std.	Char./screen std.	Char./screen std.	Std.	Std.
EVEC A DD DADARACTEDO					
EYBOARD PARAMETERS Style	IBM 5251 style	Typewriter	Typewriter	Typewriter	Typewriter
Style	IBIVI 3231 Style	Typewiitei	Typewriter	i ypewiitei	Typewriter
Character/code set	96 EBCDIC/ASCII	ASCII	ASCII	ASCII	128 ASCII
Detachability	Std.	No	Std.	No	Std.
Program function keys	24 std.	8 std.	15 std.	12 std.	12 std.
Numaria kaunad	Std.	Std.	Std.	Std.	Std.
Numeric keypad NCILLARY DEVICES	Sta.	Sta.	Std.	Sta.	Sid.
Serial printer, type, and speed	No	180 cps	40/55/150/200 cps	150 cps	40/55/150/200 cp
Line printer, type, and speed	No	No	No	No	No
Composite video	No	No	No	No	No
Port for custsupplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices	_	Audible alarm	Audible alarm, touch panel, graphics	Audible alarm	Audible alarm std.
			(Tektronix 401X		
			emulation)		
RANSMISSION PARAMETERS			1		
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Asynchronous	Synchronous	Async./sync. opt.	Asynchronous	Asynchronous
Communications protocol Code	SDLC	ASCII, CDC ASCII	ASCII, BSC opt. ASCII	ASCII, TTY ASCII	ASCII ASCII
Code Speed, bits/second	50-19,200	2000-9600	110-19,200	110-9600	75-19,200
Format	Char./block	Block	Char./block	Character	Char./block
Multipoint operation	No	Std.	Opt.	No	No
Terminal interface	RS-232-C or 20 mA	RS-232-C	RS-232-C	RS-232-C	RS-232-C, CCITT
Later at the other	0 . 44000 (0.55)	1	ام.	l.,	V.24, or 20 mA
Integral modem	Opt. (1200/2400)	No	Opt.	No	No
Integral acoustic coupler RICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	990-1,495	4,490-10,108	2,295/2,895	850	850
Controller, purchase		_	<u> </u>	-	_
Monthly prime-shift maintenance	23	53-82	31/43	25	16
Annual prime-shift maintenance	230		4.00	0.01	192
Date of announcement Date of first production delivery	3/84 4/84	5/78 5/78	4/82 6/82	2/81 2/81	4/84 9/84
Date of first production delivery Display units installed to date	1 ⁴⁷ /0 ⁴	Over 500	Over 15,000	Over 9000	Over 1000
Serviced by	Control Concepts	Control Data	CDC	Control Data	Control Data
•	1	1			
OMMENTS	Interfaces to IBM	1	721-21—Basic TTY;	1-year lease—\$50/	1-year lease\$50/
	System/34, S/36, or	1	732-31—Basic TTY &	month	month; quantity
	S/38 via protocol		PLATO/Graphics;	1	pricing: 20-49
	converter		three maintenance options: On-Site;		units—\$700 each; 50-99 units—\$650
		1	Mail-in to service		each
		1	center; Customer]	
			self-maintenance		
			1-year lease-\$125/	I	1

VENDOR AND MODEL	CTi Data CTi 1000A	CTi Data CTi 3078	Cybernex RH 7814	Cybernex RH 7813	Cybernex RH 7305
ERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Cluster 16	Standalone	Standalone	Standalone
Maximum displays/controller Fransportability	No	No	No	No	No
BM compatibility	IBM 2740/1, /2	3278-2	No	No	No
eletype compatibility	No	No	No	No	No
Other compatibility	None	None	Honeywell VIP 7800 Series	Honeywell VIP 7800/7300 Series	Honeywell VIP 7300
SPLAY PARAMETERS					1
hisplay capacity, no. of char.	1920 20K	1920	2080	2080	2080
lemory capacity, no. char./lines/pages creen arrangement, lines x char./line	24x80	1 page 24x80	1 page 24x80 plus 2	1 page 24x80 plus 2	1 page 24x80 plus 2
,		2-7700	status lines	status lines	status lines
creen area (diagonal), inches	12	12	14	14	14
ilt/swivel screen otal displayable symbols	Tilt std. 64	Tilt std. 64	Std. 128 ASCII	Std. 128 ASCII	Std. 128 ASCII
ymbol formation	5x7 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix
haracter phosphor	Green	Green	P31 green	P31 green	P31 green
olor capability	No	No	No	No	No
raphics	No	No	11 line drawing	11 line drawing	11 line drawing
rogrammable field/char. highlighting via:	la.	la.			
Underline Blink	No No	No No	Std. Std.	Std. Std.	Std.
Blank	No	Std.	Std.	Std.	Std.
Bold	No	Std.	Std.	Std.	Std.
Reverse Double size	No No	No No	Std.	Std.	Std. No
Double size croll	Std.	No No	Up/down std.	Up/down std.	Up/down std.
aging	No	No	72-line scroll	72-line scroll	No
electable cursor blinking .ddressable/readable cursor	No	No Addressable std.	Std. Both std.	Std. Both std.	Std.
ddressable/readable cursor rotected format	No Std.	Std.	Std.	Std.	Both std.
artial screen transmit	Std.	Std.	Std.	Std.	Std.
plit screen/windows	Std.	No	No	No	No
abulation haracter insert/delete	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.
ine insert/delete	No	Std.	Std.	Std.	Std.
rase	Char. std.	Std.	Char./line/page	Char./line/page	Char./line/page
YBOARD PARAMETERS			std.	std.	std.
ityle	Typewriter	Typewriter	Typewriter	Typewriter,	Typewriter,
•		1		multifunction	multifunction
Character/code set Detachability	64 Std.	64 Std.	128 ASCII Std.	128 ASCII Std.	128 ASCII Std.
rogram function keys	15 std.	24 std.	12 plus 10 pro-	12 plus 10 pro-	12 plus 10 pro-
,	1	1	grammable	grammable	grammable
lumeric keypad NCILLARY DEVICES	Std.	No	Std.	Std.	Std.
Serial printer, type, and speed	80 & 180 cps	180 cps	No	No	No
ine printer, type, and speed	No	No .	No	No	No
Composite video Port for custsupplied devices	No	No No	No Std.	No Std.	No No
ort for custsupplied devices Other vendor-supplied devices	Std. 55 cps docu. printer	55 cps docu. printer	Opt.	Opt.	<u></u>
ANSMISSION PARAMETERS Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
echnique	Asynchronous	Synchronous	Sync./async.	Sync./async.	Asynchronous
communications protocol	IBM 2740	BSC, SNA/SDLC	Honeywell/ASCII	Honeywell/ASCII	Honeywell/ASCII
ode peed, bits/second	EBCDIC To 1800 bps	EBCDIC Up to 9600	ASCII Up to 38,400	ASCII Up to 38,400	ASCII Up to 38,400
ormat	Block	Character	Char./block	Char./block	Character
fultipoint operation	Std.	Std.	Std.	Std.	No
erminal interface	RS-232-C	RS-422	RS-232-C, RS-422, or 20mA	RS-232-C, RS-422, or 20mA	RS-232-C, RS-422 or 20mA
ntegral modem	No	No	No	No	No ZUMA
ntegral acoustic coupler	No	No	No	No	No
ICING AND AVAILABILITY	2 250	1 250	Contrat was de-	Control was des	Company
risplay station, purchase controller, purchase	2,350	1,250 6,400	Contact vendor	Contact vendor	Contact vendor
flonthly prime-shift maintenance	25	14			<u> </u>
Annual prime-shift maintenance	6/02	2/02	2/05	2/05	3/85
Date of announcement Date of first production delivery	6/82 7/82	3/83 4/83	3/85 9/85	3/85 9/85	9/85
isplay units installed to date	Over 500	<u> </u>	<u> </u>		
Serviced by	TRW	TRW	Cybernex, Honeywell	Cybernex, Honeywell	Cybernex, Honeyw
DMMENTS		1	ParaData Upward-compatible	ParaData Sold exclusively in	ParaData Sold exclusively in
NITHER TO			from Cybernex SA	Canad by Honeywell	Canad by Honeyw
			7814 & SA 7800;	Canada; sold exclu-	Canada; sold exclu
			sold exclusively in Canada by Honeywell	sively in U.S. by ParaData; lifetime	sively in U.S. by
			Canada by Honeywell Canada; sold exclu-	keyboard warranty	ParaData; lifetime keyboard warranty
		*	sively in U.S. by	.,,	
			ParaData; lifetime		
	1	,	keyboard warranty	i	i

	I	T	T	<u> </u>	
VENDOR AND MODEL	Cybernex RB 1100	Cybernex XLA D200	Cybernex XLA 87 Series	Cybernex SA 2622+	Cybernex RG 220 Turbo
	1100	ALA DZ00	ALA 07 Series	3A 2022 1	11G 220 Tulbo
TERMINAL DESCRIPTION Standalone or cluster	Concatenation	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller	I—	-	_		
Transportability	No	No	No	No	No
IBM compatibility Teletype compatibility	No No	No Std.	No Std.	No Std.	No Std.
Other compatibility	Burroughs ET 1100	Data General D200	See comments	Hewlett-Packard	Digital VT220
DISPLAY PARAMETERS					
Display capacity, no. of char.	2080	1920	2000	2080	Up to 3248
Memory capacity, no. char./lines/pages	15 pages	1 page	1 page	6 pages	1 page
Screen arrangement, lines x char./line	12/24x40/80 plus 2 status lines	24x80	24x80	24x80 plus 2 status lines	24x80/132 plus
Screen area (diagonal), inches	14	14	14	14	14
Tilt/swivel screen	Std.	Std.	Std.	Std.	Std.
Total displayable symbols Symbol formation	256 ASCII 7x9 dot matrix	128 ASCII 7x9 dot matrix	128 ASCII 7x9 dot matrix	256 ASCII 7x9 dot matrix	256 ASCII 7x10/10x14
Character phosphor	P31 green	P31 green	P31 green	P31 green	P31 green
Color comphility	No	Ma	Na	No	No.
Color capability Graphics	No	No No	No Bus. graphics opt.	No	No Bus. graph./prog.
Programmable field/char. highlighting via:					
Underline Blink	Std.	Std. Std.	No Std.	Std. Std.	Std. Std.
Blank	Std.	No	Opt.	Std. Std.	No
Bold	Std.	Std.	Std.	Std.	Std.
Reverse Double size	Std.	Std. No	Std. Opt.	Std. No	Std. Std.
Scroll	Up/down std.	Up std.	Up/down std.	Up/down std.	Up/down, smooth
Paging	15 std.	No	No	6 std.	1 std.
Selectable cursor blinking	Std.	No Both and	Opt. Both std.	Std. Both std.	Std.
Addressable/readable cursor Protected format	Both std. Std.	Both std.	Std.	Std.	Both std. Std.
Partial screen transmit	Std.	No	Std.	Std.	No
Split screen/windows	No	No	No	Std.	Std.
Tabulation Character insert/delete	Fwd./back std. Std.	No No	Fwd./back std. Std.	Std. Std.	Std. Std.
Line insert/delete	Std.	No	Std.	Std.	Std.
Erase	Char./line/page	Line/screen std.	Char./line/page	Char./line/page	Char./line/page
KEYBOARD PARAMETERS	std.		std.	std.	std.
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	(Burroughs) 128 ASCII	128 ASCII	128 ASCII	128 ASCII	256 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	10 physical; 20	15 fixed; 15 pro-	Varies; model	8 std.	105 (6 banks of 15
Normania kananad	logical	grammable Std.	dependent	Std.	keys) Std.
Numeric keypad ANCILLARY DEVICES	Std.	Sta.	Std.	510.	Sta.
Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed Composite video	No No	No No	No No	No No	No Std.
Port for custsupplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices	Opt.	_			Opt.
TRANSMISSION PARAMETERS					
Mode Technique	Half-duplex Async./sync.	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous
Communications protocol	Burroughs	ASCII	ASCII	ASCII	ASCII
Code	ASCII	ASCII	ASCII	ASCII	ASCII
Speed, bits/second Format	Up to 38,400 Line/block	Up to 19,200 Character	Up to 19,200 Char./block	Up to 19,200 Char./block	Up to 38,400 Character
Multipoint operation	Std.	No	No	No	No
Terminal interface	RS-232-C, TDI	RS-232-C or 20mA	RS-232-C or 20mA	RS-232-C or 20mA	RS-232-C, RS-423,
Integral modem	No	No	No	No	20mA No
Integral acoustic coupler	No	No	No	No	No
PRICING AND AVAILABILITY			1	ì	
Display station, purchase Controller, purchase	Contact vendor	Contact vendor	Contact vendor	Contact vendor	Contact vendor
Monthly prime-shift maintenance	<u> </u>	<u></u>	_	<u></u>	
Annual prime-shift maintenance	1-	<u> -</u>	-		
Date of announcement Date of first production delivery	12/85 12/85	2/82 5/82	1/82 3/82	12/85 12/85	3/85 6/85
Display units installed to date	-/55	-	-	1-2/00	<u> </u>
Serviced by	Cybernex, third	Cybernex, third	Cybernex, third	Cybernex, third	Cybernex, third
COMMENTS	party vendors Totally remappable	party vendors Print page, through	party vendors Emulations for	party vendors Plug-compatible	party vendors Special Cybernex
	keyboard; 109-key	print with display,	Hazeltine 1510/1520	replacement for	menu with extra
	keyboard, ET 1100-	both buffered; 15	Rexon 303, others;	HP 2622; replaces	functions beyond
	compatible, with extra cursor pad;	function keys, with up to 80 characters	lifetime keyboard warranty; custom-	HP 2392A in HP 2622 applications; six	DEC; 6 banks of 15 keys each in add-
	lifetime keyboard	each; lifetime	ization available,	full pages of mem-	ition to 15 prog-
	warranty; upward	keyboard warranty	volume dependent	ory standard;	rammable function
	compatible with Cybernex SA 830			lifetime keyboard warranty	keys; lifetime keyboard warranty;
	-,====================================			,	106 keys
L	L	L	1	L	I

VENDOR AND MODEL	Cybernex XLB 4309	Cybernex XM 3270	Cybernex XLB 3178	Cybernex XLB 5291	Data General Dasher D210/D211
ERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller	No.	N-	No	No	16 No
Transportability IBM compatibility	No	No 3278 w/prot. conv.	3178 w/prot. conv.	5291 w/prot. conv.	No
Teletype compatibility	Std.	Std.	Std.	Std.	Std.
Other compatibility	MAI Basic Four EVDT 4309	ANSI X3.64	ANSI X3.64	ANSI X3.64	DG D100/D200, ANS X3.64
ISPLAY PARAMETERS	2000	2000	2000	2000	1920
Display capacity, no. of char. Memory capacity, no. char./lines/pages	1 page	1 page	1 page	1 page	1920
Screen arrangement, lines x char./line	24x80 plus	24x80 plus	24x80 plus	24x80 plus	24x80
,,,,,,,	status line	status line	status line	status line	
Screen area (diagonal), inches	14	14	14	14	12
Tilt/swivel screen	Std.	Std.	Std.	Std.	Tilt std.
Total displayable symbols	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128; 256
Symbol formation Character phosphor	7x9 dot matrix P31 green	7x9 dot matrix P31 green	7x9 dot matrix P31 green	7x9 dot matrix P31 green	7x11 in 10x12 cell P31 green
 Color capability	No	No	No	No	No
Graphics	Business graphics	No	No	No	No
Programmable field/char. highlighting via:			i	1	
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	No
Bold	Std.	Std.	Std.	Std.	Dim std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	No	No	No Up/down std.	No Up/down std.	No Up std.
Scroll	Up/down std.	Up/down std.	No	No	No
Paging	Std.	Std.	Std.	Std.	No
Selectable cursor blinking Addressable/readable cursor	Both std.				
Protected format	Std.	Std.	Std.	Std.	No
Partial screen transmit	Std.	Read modified	No.	No.	No
Split screen/windows	No	No	No	No	No
Tabulation	Std.	Std.	Std.	Std.	Std.
Character insert/delete	Std.	Std.	Std.	Std.	No
Line insert/delete	Std.	Std.	Std.	Std.	No
Erase	Char./line/page	Char./line/screen	Char./line/screen	Char./line/screen	Line/screen std.
	std.	std.	std.	std.	Į.
EYBOARD PARAMETERS Style	Typewriter	Typewriter (IBM)	Typewriter (IBM)	Typewriter (IBM)	Typewriter
Character/code set	128 ASCII				
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	28 std.	24 std.	24 std., plus all	24 std., plus all	15 std.
rogram ranction keys	20 314.	24 314.	non-ASCII keys	non-ASCII keys	To ota.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES		İ	İ	1	
Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed	No	No	No	No	No
Composite video	No	No	No	No	No
Port for custsupplied devices	Std.	Std.	Std.	Std.	Std. (D211 only)
Other vendor-supplied devices	Opt.	Opt.	Opt.	Opt.	
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Communications protocol	ASCII	ASCII	ASCII	ASCII	ASCII
Code	ASCII	ASCII	ASCII	ASCII	ASCII
Speed, bits/second	Up to 38,400	Up to 38,400	Up to 38,400	Up to 38,400	50-19,200
Format	Char./block	Char./block	Character	Character	Character
Multipoint operation	No	No	No	No	No
Terminal interface	RS-232-C std.	RS-232-C std.;	RS-232-C std.;	RS-232-C std.;	RS-232-C; RS-422
	l.,	RS-422 opt.	RS-422 opt.	RS-422 opt.	20mA (D211)
Integral modem	No	No	No	No	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY	Contact vendor	Contact vendor	Contact vendor	Contact vendor	995/1,195
Display station, purchase Controller, purchase	Contact vendor	Contact vendor	vendor		
Monthly prime-shift maintenance	1	1_	<u>_</u>	<u></u>	13/15
Annual prime-shift maintenance	_	_			1.5, 1.5
Date of announcement	10/85	9/83	1/86	1/86	5/83
Date of first production delivery	10/85	11/83	1_	1	7/83
Display units installed to date	I—'	I—'	_		<u>·</u>
Serviced by	Cybernex, third	Cybernex, third	Cybernex, third	Cybernex, third	Data General
•	party vendors	party vendors	party vendors	party vendors	
OMMENTS	Completely MAI-	Block mode terminal	Character mode ter-	Character mode ter-	
	compatible, includ-	suited to packet-	minal; works with	minal; works with	
	ing Basic Four	switched networks;	any protocol conv-	any protocol conv-	
	motor bars; 114	supported by Sim-	erter; looks to	erter; looks to	
	keys; lifetime	ware, Pearle, & IBM	operator as 3278-2;	operator as 5291;	
	keyboard warranty	7171 protocol con-	looks to protocol	looks to protocol	1
		verters; IBM 3278	converter as VT100;	converter as VT100;	1
	1	keyboard layout;	lifetime keyboard	lifetime keyboard	1
	1	selectable ANSI	warranty	warranty	

VENDOR AND MODEL	Data General Dasher D280C	Data General Dasher D410	Data General Dasher D460	Datamaxx EXT-4300	Datamaxx EXT-1200
ERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller	No	16	16 No.	NI.	N _a
Transportability	No No	No No	No No	No 3278	No 3278
IBM compatibility Teletype compatibility	Std.	Std.	Std.	Std.	Std.
Other compatibility	3tu.		DG D400, ANSI X3.64		DEC VT100; see
Other Compatibility		Da D+00, ANOI X0.04	Da 5400, Alloi 70.04	occ comments	comments
ISPLAY PARAMETERS					
Display capacity, no. of char.	1920	1944, 3240	1944, 3240	2000	2000
Memory capacity, no. char./lines/pages	<u></u>	-		10 pages	10 pages
Screen arrangement, lines x char./line	24x80	24x81/135	24x81/135	25x80	25x80
Screen area (diagonal), inches	13	12	12	14; 12 opt.	14; 12 opt.
Tilt/swivel screen	Std.	Tilt std.	Tilt std.	Std.	Std.
Total displayable symbols	96 ASCII	256	256	128	128
Symbol formation	7x10 dot matrix	7x11 in 10x12 cell	7x11 in 10x12 cell	7x11 dot matrix	7x11 in 10x12 cell
Character phosphor	Color	P31 green	P31 green	P39 green	P31 green std.;
		1			amber opt.
Color capability	8 colors std.	No	No	No	No
Graphics Programmable field/char. highlighting via:	No	No	Std.	No	No
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	No	No.	No.	Std.	Std.
Bold	Std.	Dim std.	Dim std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	No	No	No	No	No
Scroll	Up std.	Up std.	Up std.	Up/down std.	Up/down std.
Paging	No	No Std.	No Std.	10 std. Std.	10 std. Std.
Selectable cursor blinking Addressable/readable cursor	No Both std.	Both std.	Sta. Both std.	Sta. Both std.	Both std.
Protected format	No	Std.	Std.	Std.	Std.
Partial screen transmit	No	No.	No.	Std.	Std.
Split screen/windows	No	24 std.	24 std.	No	No
Tabulation	Std.	Std.	Std.	Fwd./back std.	Fwd./back std.
Character insert/delete	No	Std.	Std.	Std.	Std.
Line insert/delete	No	Std.	Std.	Std.	Std.
Erase	Line/screen std.	Line/screen/window	Line/screen/window	Char./line/screen	Char./line/screen
EVDO A DD. DA DAMETEDO		std.	std.	std.	std.
EYBOARD PARAMETERS Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Style	Typewriter	Typewitter	ypewitei	ypewitei	Typewitter
Character/code set	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	15	15 std.	15 std.	40 std.	40 std.
		la.		0.1	l
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES	No .	No	No	340 cps matrix	340 cps matrix
Serial printer, type, and speed Line printer, type, and speed	No	No	No	1000 lpm band	1000 lpm band
Composite video	No	No	No	No	No
Port for custsupplied devices	Opt.	Std.	Std.	Std.	Std.
Other vendor-supplied devices		<u> </u>		IBM PC-compatible	IBM PC-compatible
RANSMISSION PARAMETERS Mode	Full-duplex	Full-duplex	Full-duplex	Half-duplex	Half-duplex
Mode Technique	Asynchronous	Asynchronous	Asynchronous	Async./sync.	Asvnc./svnc.
Communications protocol	ASCII	ASCII	ASCII	Polled	Polled
Code	ASCII	ASCII	ASCII	ASCII	ASCII
Speed, bits/second	Up to 19,200	110-19,200	110-19,200	300-38,400	300-38,400
Format	Character	Character	Character	Char./line/block	Char./line/block
Multipoint operation	No	No	No	Std.	Std.
Terminal interface	RS-232-C or 20mA	RS-232-C, RS-422,	RS-232-C, RS-422,	RS-232-C, TDI std.	RS-232-C, TDI std
Integral modem	No	or 20mA No	or 20mA No	No	No
Integral modern Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY	1			1	1
Display station, purchase	3,750	1,635	1,835	1,550	1,695
Controller, purchase		1-	<u> </u>		<u> </u>
Monthly prime-shift maintenance		17	19	25	25
Annual prime-shift maintenance	0.01	E (02	E /02	240	240
Date of announcement	8/81	5/83	5/83	 5/84	5/85
Date of first production delivery Display units installed to date		7/83	7/83	2,000	400
Serviced by	Data General	Data General	Data General	Datamaxx, TRW,	Datamaxx, TRW,
Contract by	- Control	2000000		Western Union	Western Union
OMMENTS	Lease and rental		Alphanumeric and	Compatible with	Compatible with
	available via third		character-mapped	Burroughs MT983 &	Burroughs MT983
	parties and terminal		graphics terminal;	ET 1100, NCR 796-	ET1100, NCR 796
	resellers		additional 3572		301 & 7900 Mode
			user-defined	can be upgraded to	can be upgraded to
			characters/symbols	workstation with	workstation with
	I	1	available	Exxpert IIno extra	Exxpert il—no ext
	}	1			
				software needed; quantity discounts	software needed; quantity discounts

VENDOR AND MODEL	Datamaxx EXT-7301	Datamaxx DMX-1100	Datapoint 8242	Datapoint 8215	Datastream 8178
RMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Either
Maximum displays/controller	No	No	Variable No	Variable No	32 No
BM compatibility	3278	No	W/Datapoint proc.	Via processor	3178/3278
eletype compatibility	Std.	Std.	Std.	Std.	Std.
Other compatibility	See comments	Burroughs ET 1100		ADDS, Hazeltine,	DEC VT220
SPLAY PARAMETERS				Lear Siegler, Qume	
SPLAY PARAMETERS Display capacity, no. of char.	2000	2000	1920	1920	1920, 3300
Memory capacity, no. char./lines/pages	10 pages	10 pages	80/25/1	80/25/1	3300
Screen arrangement, lines x char./line	25x80	25x80	25x80	25×80	24x80/132
Caraca area (diagonal) inches	14. 12 ans	14. 12 ont	14	14	14
Green area (diagonal), inches Filt/swivel screen	14; 12 opt. Std.	14; 12 opt. Std.	Std.	Std.	Std.
otal displayable symbols	128	128	96 ASCII	96 ASCII	96
Symbol formation	7x11 in 10x12 cell	7x11 in 10x12 cell	7x9 dot matrix	7x9 dot matrix	7x7 dot matrix
Character phosphor	P31 green std.;	P31 green	Amber	Amber	P31 green or P134
Natara annah ilia.	amber opt.	l _{N-}	N.	N.	amber
Color capability Graphics	No No	No No	No No	No No	No ASCII (business)
Programmable field/char. highlighting via:	110		1.00	'''	Cocii (business)
Underline	Std.	Std.	No	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold Reverse	Std. Std.	Std. Std.	No No	Std. No	Std.
Double size	No	No	No	No	No
Scroll	Up std.	Up/down std.	Up/down std.	Up std.	Std.
aging	10 std.	10 std.	1 page	1 page	No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both std. Std.	Both std. Std.	Both std. Std.	Both std. Std.	Both std. Std.
Partial screen transmit	Std.; NCR msg. mode	Std.	Std.	Std.	Std.
Split screen/windows	No	No	Std.	No	No
abulation	Fwd./back std.	Fwd./back std.	Std.	Std.	Std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
ine insert/delete rase	Std. Char./line/screen	Std. Char./line/screen	Std. Line/screen std.	Std. Line/screen std.	Std. Char./line/screen
.i ase	std.	std.	Line/Screen Std.	Line/screen sta.	std.
YBOARD PARAMETERS	0.0.	o.c.	i		Jord.
Style	Typewriter	Typewriter	Typewriter (Selec-	Typewriter (Selec-	Typewriter (IBM
			tric)	tric)	3180-style)
Character/code set	128 ASCII	128 ASCII	96 ASCII	96 ASCII	96 ASCÍI/ÉBCDIC
Detachability Program function keys	Std. 40 std.	Std. 20 std.	Std. 10 std.	Std. 14 std.	Std. 24 std.
rogram function keys	40 stu.	20 std.	10 std.	14 std.	24 510.
lumeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES					`
Serial printer, type, and speed	340 cps matrix	340 cps matrix	30/160/300 cps imp.	30/160/300 cps imp.	No
ine printer, type, and speed Composite video	1000 lpm band No	1000 ipm band No	300/600 lpm band No	300/600 lpm band No	No No
Port for custsupplied devices	Std.	Printer port std.	RS-232-C std.	RS-232-C std.	RS-232-C
Other vendor-supplied devices	IBM PC-compatible	_			
RANSMISSION PARAMETERS	Half/full-duplex	Half-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
viode Fechnique	Asynchronous	Async./sync.	Asynchronous	Asynchronous	Sync./async.
Communications protocol	Polled	Polled	<u> </u>	l— ·	ASCII/BSC/SNA
Code	ASCII	ASCII	ASCII	ASCII	ASCII/EBCDIC
Speed, bits/second	300-19,200	300-9.6K/19.2K	50-19,200 Character	50-19,200 Character	Up to 19,200
ormat Multipoint operation	Line/page Std.	Char./line/page Std.	Character Std.	Character Std.	Char./block No
Ferminal interface	RS-232-C, NCR	RS-232-C, TDI	RS-232-C	RS-232-C	RS-232-C or 20 m
			1		
ntegral modem	No	No	No .	No	No
ntegral acoustic coupler RICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	1,695	1,495	1,395	599	995
Controller, purchase			Processor dependent	Processor dependent	5,000-26,000
Monthly prime-shift maintenance	25	25	14	11	-
Annual prime-shift maintenance	240	240	168	154	
Date of announcement	5/85	9/85	10/85 10/85	10/85 7/85	5/85
Date of first production delivery Display units installed to date	200	200	150	250	5/85
Serviced by	Datamaxx, TRW,	Datamaxx, TRW,	Intelogic Trace,	Intelogic Trace,	Datastream
,	Western Union	Western Union	Inc.	Inc.	
	Compatible with	Quantity discounts		1 .	Attaches to Data-
OMMENTS	Burroughs MT983 &	available	1	1	stream BSC or SN
DMMENTS			i .	1	controllers; also
DMMENTS	ET1100, NCR 796-			·	
DMMENTS	ET1100, NCR 796- 301 & 7900 Model 3;				attaches to DEC
DMMENTS	ET1100, NCR 796- 301 & 7900 Model 3; can be upgraded to				attaches to DEC host or timesharin
OMMENTS	ET1100, NCR 796- 301 & 7900 Model 3;				attaches to DEC
OMMENTS	ET1100, NCR 796- 301 & 7900 Model 3; can be upgraded to workstation with				attaches to DEC host or timesharin

Std. Std.	VENDOR AND MODEL	Datastream 8180	Davox 1911	Davox 2911	Decision Data 3751-11	Decision Data 3791-01
Either Cluster Standardon or cluster Standardo						
ramportability Mo compatibility What compatibility						
M. compatibility						
Section						
Their compatibility						
SPAIN F DATAMETERS					INO	
		1920-3564	2000	2000	1920	1920
24.480 2					1920	1920
1					24x80 plus status	24x80
Ilif.swived screen	,			1	line	
128						
Variety of Comments 7x9 dot matrix						
P31 green or P134 and part of P33 green or P134 and part of P34 green and display (and part of P34 and part of P34 and part of P34 green and display (and part of P34 and pa						
amber amber opt. No						
No				100.0.	1 33 green	1 55 green
ASCII (business) No	color capability	No	No	7-color support		No
Togrammable field/char. highlighting visit Underline Und	raphics					
Strd. Strd	rogrammable field/char. highlighting via:			l .	L .	l
Blank Std.						
Std. Std.						
Reverse Sid. Std.						
No						
Std. Std.						
No						
Std. Std.						
Std. Std.	electable cursor blinking	Std.				
Std. No	ddressable/readable cursor	Both std.			Std.	Std.
Dit screen/windows Std.						Std.
Std. Std.						
Name Name						
In insert/delete rares are char-/ine/screen std. Std. Std. Std. Std. Std. Std. Std. Std.						
Char. / line / screen Std.						
YBOARD PARAMETERS Typewriter (IBM 3180-style)						
YBOARD PARAMETERS Typewriter (IBM 3180-style) Bob ASCII/EBCDIC Std. Std			Old.	J	John.	J
Typewriter (IBM 3180-style) 96 ASCII/EBCDIC Std. 24 std. 16 opt. 16 opt. 16 opt. 16 opt. 17 ypewriter entry Std. Std. Std. Std. Std. Std. Std. Std.		ota.				
16/18/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/19/18/18/19/18/19/18/19/18/18/19/18/18/19/18/18/18/18/18/18/18/18/18/18/18/18/18/		Typewriter (IBM	Typewriter	Typewriter	Typewriter, data	Typewriter
16			. ,,	',,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
24 std. 16 opt. 16 opt. 24 std. 24 std. 24 std. 24 std. 24 std. 24 std. 3	Character/code set	96 ASCÍI/ÉBCDIC	64 ASCII/96 EBCDIC	64 ASCII/96 EBCDIC	EBCÓIC	16/188 MNC EBC
Numeric keypad NCILLARY DEVICES NCILLARY DEVICES Serial printer, type, and speed ine printer, type, and speed in printer, type, and speed ine printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in						
NO. NO. NO. NO. NO. NO. NO. NO. NO. NO.	rogram function keys	24 std.	16 opt.	16 opt.	24 std.	24 std.
NO. NO. NO. NO. NO. NO. NO. NO. NO. NO.	Jumaria kaynad	C+d	C+4	6+4	C+d	Cod
Serial printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer, type, and speed in printer vendor-supplied devices in printer vendor-supplied ve		Stu.	Stu.	Std.	Joid.	Stu.
Line printer, type, and speed Composite video Composite video No No No No No No No No No No No No No		No	No	No	No	No
Other vendor-supplied devices Deter vendor-supplied devices Cherry place of first production delivery Display station, purchase Controllers, stream BSC or SNA controllers; also attaches to DEC parts of the first and the parts of the first and the parts of the first and the parts of the first and the parts of the par		No	No	No	No	No
ANSMISSION PARAMETERS Mode Fachnique Sync./async. Sync./						
RANSMISSION PARAMETERS Mode Fechnique Communications protocol Communications protocol Communications protocol Code Speed, bits/second Correct Correct Correct Correct Communications protocol Code ASCII/BSC/SNA ASCII/EBCDIC Correct Correct Correct Correct Correct Communications protocol Code ASCII/BSC/SNA ASCII/EBCDIC BSC, SNA/SDLC BSC, SNA/SDLC BSC, SNA/SDLC BSC, SNA/SDLC BSC, SNA/SDLC BSC, SNA/SDLC BBCDIC/ASCII BBCDIC/ASCII BBCDIC BBCDIC Correct BBCDIC Correct Correct BBCDIC Correct Correct BBCDIC BCDIC BBCDIC BBCDIC BBCDIC BBCDIC BBCDIC BBCDIC BBCDIC BBCDIC BBCD		RS-232-C	No	No		
RANSMISSION PARAMETERS ### Allf/full-duplex Sync./async. Communications protocol Code Code Code Code Code Code Code Code	Other vendor-supplied devices		 	-		Keylock
Accel rechnique Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Sync./async. Synchronous BSC, SNA/SDLC BSC, S					card reader, keylock	
Half/full-duplex Sync./async. Balf/cull-duplex Sync./async. Synchronous Synchronous Synchronous BSC, SNA/SDLC BSC,	ANSMISSION PARAMETERS					1
Sync./async. Sync.		Half/full-duplex	Half/full-duplex	Half/full-duplex	Half-duplex	Half-duplex
ASCII/BSC/SNA ASCII/EBCDIC EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC ASCII EBCDIC EBCD						
ASCII/EBCDIC ASCII	Communications protocol	ASCII/BSC/SNA	BSC, SNA/SDLC	BSC. SNA/SDLC	BSC, SNA/SDLC	BSC, SNA/SDLC
ipeed, bits/second ormat Char./block Char./block No Char./block Std. Std. Std. Std. Std. Std. Std. Std.	ode	ASCII/EBCDIC	EBCDIC/ASCII	EBCDIC/ASCII	EBCDIC	EBCDIC
Multipoint operation erminal interface No RS-232-C Std. RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C Twinax phase-encoded encoded RS-232-C RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C Twinax phase-encoded RS-232-C RS-232-C Twinax phase-encoded Twinax phase-encoded Twinax phase-encoded Twinax phase-encoded Twinax phase-encoded Twinax phase-encoded Twinax phase-encoded Twinax phase-encoded	peed, bits/second	Up to 19,200	75-9600	75-9600	Up to 1M	Up to 1M
reminal interface reminal interface RS-232-C or 20 mA RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C RS-232-C Twinax phase-encoded encoded No No No No No No No No No N						
Integral modem Integral acoustic coupler Integral acoustic coupler Integral acoustic coupler Integral acoustic coupler Integral acoustic coupler Integral acoustic coupler Integral acoustic coupler Integral acoustic coupler Integral acoustic coupler Integral acoustic coupler Integral acoustic coupler Integral modem Integ						
No No No No No No No No	erminal interface	HS-232-C or 20 mA	HS-232-C	HS-232-C		Twinax,phase-
No	stegral modern	No	No	No		
ICING AND AVAILABILITY 1,850 2,295 3,880-5,455 3,880-5,455						
1,850 1,850 1,850 1,950 1,550 1,930 1,93		110	140	110	1100	""
Sometroller, purchase		1.850	2.295	5.600	1.930	1.550
Monthly prime-shift maintenance unusual prime-shift maintenanc						
Attaches to Data- stream BSC or SNA controllers; also attaches to DEC host or timesharing	fonthly prime-shift maintenance		<u> </u>			
Datastream SC or SNA controllers; also attaches to DEC host or timesharing					230	170/yr. (1st 2 yrs
Datastream SC or SNA controllers; also attaches to DEC host or timesharing			6/81			7/83
Datastream CDC CDC Decision Data Decision Data MMENTS Attaches to Datastream BSC or SNA controllers; also attaches to DEC host or timesharing		5/85				
Attaches to Data- stream BSC or SNA controllers; also attaches to DEC host or timesharing		Data atua am				
stream BSC or SNA controllers; also attaches to DEC host or timesharing	erviced by	Datastream	CDC	CDC .	Decision Data	Decision Data
stream BSC or SNA controllers; also attaches to DEC host or timesharing	OMMENTS I	Attachee to Doto				
controllers; also attaches to DEC host or timesharing						
attaches to DEC host or timesharing						
or timesharing						

	Decision Data	Delta Data	Delta Data	Digital Equipment	Digital Equipment
VENDOR AND MODEL	3761-01	Delta Data D2830-II	D8303	VT100 Series	VT220
TERMINAL DESCRIPTION Standalone or cluster	Either	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller Transportability	8 No	No	No.	No	No
IBM compatibility	5291	No	No	No	No
Teletype compatibility Other compatibility	No IBM 5251-11	Std. Burroughs ET1100	Std.	Std. VT100 Series	Std. VT100/VT52, ANSI X3.64
DISPLAY PARAMETERS Display capacity, no. of char.	1920	1920	2240	1848, 1920, 3168	1920, 3168
Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line		1920/24/10 24x80 plus status	40K characters 28x80		
Screen area (diagonal), inches	line 14	lines 14	14	12	12
Tilt/swivel screen	Std.	Std.	Std.	Opt.	Tilt std.
Total displayable symbols Symbol formation	96, MNC-188 7x9 dot matrix	128 ASCII 7x9 dot matrix	256 ASCII 7x9 dot matrix	128 ASCII 7x9 dot matrix	256 7x10 dot matrix
Character phosphor	P39 green	P31 green	P31 green	P4 white std.	White, green, or amber
Color capability Graphics	No No	No No	No No	No Std. (VT125)	No No
Programmable field/char. highlighting via: Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std. (VT102); opt.	Std.
Blank Bold	Std.	Std. Std.	Std. Std.	No Std. (VT102/VT131)	No Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size Scroll	No Up/down std.	No Up/down std.	No Up/down std.	Std. Smooth/bidir.	Std. Std.
Paging	Std.	10 std.	20 std.	No	No
Selectable cursor blinking Addressable/readable cursor	Std. Std.	Std. Both std.	Std. Both std.	Std. Both std.	Std. Both std.
Protected format	Std.	Std.	Std.	No	No
Partial screen transmit Split screen/windows	Std. Window	Std. No	Std. 8 std.	Std. 2 std.	Std. 2 std.
Tabulation Character insert/delete	Std. Std.	Fwd./back std. Std.	Fwd./back std. Std.	Std. & program tabs	Std. & program tabs Std.
Line insert/delete	Std.	Std.	Std.	Std. (VT102/VT131) Std. (VT102/VT131)	Std. Std.
Erase	Std.	Char./line/display std.	Char./line/display std.	Char./line/screen std.	Char./line/screen std.
KEYBOARD PARAMETERS Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	96, MNC-188 EBCDIC	128 ASCII	127 ASCII	ASCII	ASCII
Detachability Program function keys	Std. 24 std.	Std. All soft keyboard	Std. 96 std.	Std. 4 std.	Std. 20 std.
Numeric keypad ANCILLARY DEVICES	Std.	Std.	No	Std.	Std.
Serial printer, type, and speed	No	Opt.	Opt.	30-240 cps impact	30-240 cps impact
Line printer, type, and speed Composite video	No No	Opt. No	Opt.	No Std.	No Std.
Port for custsupplied devices	No	Std.	Std.	Std.(VT102/125/131)	Std.
Other vendor-supplied devices	Keylock			Graphics printer (VT125)	
TRANSMISSION PARAMETERS					
Mode	Half-duplex	Half/full-duplex	Half/full-duplex	Full-duplex	Full-duplex
Technique Communications protocol	Synchronous BSC, SNA/SDLC	Async./sync. Burr. poll/sel.,TTY	Async./sync. TTY, Xon/Xoff	Asynchronous ASCII/ANSI	Asynchronous ASCII/ANSI
Code Speed, bits/second	EBCDIC Up to 1M	ASCII Up to 19,200	ASCII Up to 19,200	ASCII 50-19,200	ASCII 75-19,200
Format	Block	Char./line/block	Char./block	Character	Character
Multipoint operation Terminal interface	Std.	Std. RS-232-C	No RS-232-C	No RS-232-C std.; 20mA	No BS-232-C 20mA o
	Twinax	l .	ĺ	opt.	RS-232-C, 20mA, o RS-423
Integral modem Integral acoustic coupler	No No	No No	No No	No No	No No
PRICING AND AVAILABILITY Display station, purchase Controller, purchase	1,820	995-1,295	2,395	895-3,800	1,095
Controller, purchase Monthly prime-shift maintenance		33	33	18-29	6
Annual prime-shift maintenance Date of announcement	125 4/84	348 4/84	348 7/84	 1978	<u></u>
Date of first production delivery	4/84	6/84	9/84	1978	11/83
Display units installed to date Serviced by	8000 Decision Data	700 Delta Data	200 Delta Data	Over 500,000 Digital Equipment	Digital Equipment
COMMENTS	Operator or prog-	Full Burroughs	Expansion to full	Corp. Models: VT100,	Corp. Plain language set-
COMMENTO	rammer can store	ET1100 emulation	IBM PC operation	VT101, VT102,	up menu for feature
	1920 characters in off-line workpad		including options for LAN, storage	VT125 (graphics), and VT131; ANSI-	selection in English French, & German;
	on mic workpau		capacity, printers,	standard escape	multinational char-
			& second host port	sequences	acter set support; multiple language
					keyboards available;
					word processing ke boards available

ERMINAL DESCRIPTION Standalone or cluster Maximum displays/controller Transportability	Standalone				
Standalone or cluster Maximum displays/controller Transportability	Standalone				
Transportability		Standalone	Standalone	Standalone	Standalone
	N-		Portable case	Doministra	Domestie
IBM compatibility	No No	No No	No	Portable case	Portable case No
Teletype compatibility	Std.	Std.	No	No	No
Other compatibility		VT100/52; Tek. 4010/		HP2640, HP2645A,	HP2640, HP2645A
	4014; ANSI X3.64	4014; ANSI X3.64	HP2622	HP2622	DEC VT100/VT52
ISPLAY PARAMETERS	1920, 3168	1000 0100	1920	1000 0100	1000 0100 000
Display capacity, no. of char. Memory capacity, no. char./lines/pages	1920, 3168	1920, 3168	4.2K	1920, 3168 16K std.; 32K opt.	1920, 3168, 3696 32K
Screen arrangement, lines x char./line	24x80/132	24x80/132	24x80	24x80/132	24x80/132, 28x1
	'	1			
Screen area (diagonal), inches	12	13	12	12	12
Tilt/swivel screen Total displayable symbols	Tilt std. 256	Tilt std. 256	No 128 ASCII	No 128 ASCII	No 128 ASCII
Symbol formation	8x10 dot matrix	8x10 dot matrix	7x11 dot matrix	7x11 dot matrix	7x11 dot matrix
Character phosphor	White, green, or	Color	P4 white	P4 white/P31	P4 white/P31
• •	amber	İ		green	green
Color capability	No	4 colors std.	No	No	No
Graphics Programmable field/char. highlighting via:	Std.	Std.		Line drawing set	Line drawing set
Programmable field/char. nighlighting via: Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	No	No	Std.	Std.	Std.
Bold	Std.	Std.	Std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size Scroll	Std. Std.	Std. Std.	No Bidir.; 3 rates	No Bidir.; 3 rates	Std. Bidir.; 3 rates
Scroii Paging	No	No	Mult. pages std.	Mult. pages std.	Mult. pages std.
Selectable cursor blinking	Std.	Std.	No	No	No
Addressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Both std.
Protected format	No	No	Std.	Std.	Std.
Partial screen transmit Split screen/windows	Std.	Std.	Std. Std.	Std.	Std.
Split screen/windows Tabulation	2 std. Std. & program tabs	2 std. Std. & program tabs	Fwd./back tab	Std. Fwd./back tab	Std. Fwd./back tab
Character insert/delete	Std. & program tabs	Std. & program tabs	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen
EVECARD DARAMETERS	std.	std.	std.	std.	std.
EYBOARD PARAMETERS Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Style	Typewriter	i ypewiitei	Typewiitei	Typewriter	Typewriter
Character/code set	ASCII	ASCII	96 ASCII	96 ASCII	96 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	20 std.	20 std.	8 std.	8 std.	8 or 16 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES	Ota.	Join.	Old.	Ota.	Old.
Serial printer, type, and speed	30-240 cps	30-240 cps impact	No	No	No
Line printer, type, and speed	No	No	No	No	No
Composite video	Std.	Std.	No	No	No
Port for custsupplied devices Other vendor-supplied devices	Std.	Std.	Std. No	Std. Modem opt., Plot	Std. Modem opt., plot
other veridor-supplied devices			INO	10 graphics opt.	10 graphics opt.
RANSMISSION PARAMETERS					
Mode	Full-duplex	Full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Communications protocol	ASCII/ANSI	ASCII/ANSI	DC1/DC2; Eng. Ack.	DC1/DC2; Eng./Ack.	DC1/DC2; Eng./A
Code	ASCII	ASCII	ASCII	ASCII	ASCII
Speed, bits/second Format	75-19,200 Character	75-19,200 Character	50-19,200 Char./line/block	50-19,200 Char./line/block	50-19,200 Char./line/block
rormat Multipoint operation	No	No	No	No	No
Terminal interface	RS-232-C, 20mA, or	RS-232-C, 20mA, or	RS-232-C	RS-232-C	RS-232-C
	RS-423	RS-423			
Integral modem	No	No	No	Opt.	Opt.
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY Display station, purchase	2,195	3,195	1,495	1,890	2,790
Controller, purchase		 	l <u></u> -	I—	
Monthly prime-shift maintenance	16	23	24	24	24
Annual prime-shift maintenance	11/00	11,00	4/02	7/01	2/01
Date of announcement	11/83	11/83	4/83	7/81	3/81
Date of first production delivery Display units installed to date	11/83	11/83	6/83	7/81	4/81
Serviced by	Digital Equipment	Digital Equipment	Contact vendor	Contact vendor	Contact vendor
	Corp.	Corp.			
	Bit-mapped graphics	Color version of		HP line-drawing set;	Same as 825 plus
OMMENTS	version of VT220;	VT240		fold-up keyboard;	downline loadable
OMMENTS	10101011 01 1 1 1 1 1 1 1 1			Lucor adjuctable	fonts
OMMENTS	two graphic proto-			user-adjustable	
OMMENTS	two graphic proto- cols: Tektronix			convenience fea-	
OMMENTS	two graphic proto- cols: Tektronix 4010/4014 & DEC			convenience fea- tures; upgrade to	
OMMENTS	two graphic proto- cols: Tektronix			convenience fea-	
OMMENTS	two graphic proto- cols: Tektronix 4010/4014 & DEC ReGIS; 800 x 240			convenience fea- tures; upgrade to CP/M computer system	

VENDOR AND MODEL	Direct	Esprit Systems	Esprit Systems	Esprit Systems	Esprit Systems
VENDOR AND MODEL	831	ESP 6110+	ESP 6115	ESP 6310	ESP 6515
ERMINAL DESCRIPTION Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller			_		
Transportability	Portable case	No	No	No	No
IBM compatibility Teletype compatibility	No No	No Std.	No Std.	No Std.	No Std.
Other compatibility	DEC VT100/VT131/	Esprit II, ADDS R25	DEC VT52	TeleVideo 925, ADDS	DEC VT100/VT220
	VT52	& View., LSI ADM 3A		View., LSI ADM 3A/5	
DISPLAY PARAMETERS	1000 2100 2000	1000	2000	2000	2000 2160
Display capacity, no. of char. Memory capacity, no. char./lines/pages	1920, 3168, 3696 16K std.; 32K opt.	1920	2000	4 pages opt.	2000, 3168
Screen arrangement, lines x char./line	24x80/132, 28x132	24x80	24x80 plus status	25x80	24x80/132 plus
-		1	line		status line
Screen area (diagonal), inches	12	14	14 Std.	14	14
Tilt/swivel screen Total displayable symbols	No 128 ASCII	Std. 128 ASCII	128 ASCII + graph.	Std. 128 ASCII + graph.	Std. 176 ASCII + graph
Symbol formation	7x11 dot matrix	7x11 dot matrix	7x11 dot matrix	7x11 dot matrix	7x11 dot matrix
Character phosphor	P4 white/P31	Green std., amber	Green or amber	Green std.; amber	Green or amber
Calan annah liin.	green	opt.		opt.	a
Color capability Graphics	No Line drawing set	No No	No Std.	No Std.	No Std.
Programmable field/char. highlighting via:	and didiving set				
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank Bold	Std. Std.	Std.	No Std.	Std.	No Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	No	No	No	No	Std.
Scroll	Bidir.; 3 rates	Std.	Up std.	Smooth std.	Smooth (4 speeds)
Paging Selectable cursor blinking	Mult. pages std.	No Std.	No Std.	4 opt. Std.	No Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Std.	Both std.
Protected format	Std.	Std.	No	Std.	No
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows Tabulation	Std. Fwd./back tab	No	No	No	2 std. Std.
Character insert/delete	Std.	Fwd./back std. Std.	Fwd./back std.	Fwd./back std. Std.	No
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Char./line/screen	Line/screen std.	Std.	Std.	Std.
EYBOARD PARAMETERS	std.				
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
2.4.0	1 ypownio.	1 ypownio	1,750	1,750	1,750,111,101
Character/code set	96 ASCII	96 ASCII	128 ASCII	128 ASCII	176 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	16 std.	4/8 std.	16/32 std.	11/22 std.	18/36 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
ANCILLARY DEVICES					
Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed Composite video	No No	No No	No No	No No	No No
Port for custsupplied devices	Std.	Opt.	Std.	Std.	Std.
Other vendor-supplied devices	Modem opt., Plot				
	10 graphics opt.				
TRANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Communications protocol Code	X-on/X-off, DTR	TTY	ANSI/TTY	TTY	TTY ASCIL/ANSI
Speed, bits/second	ASCII 50-19,200	ASCII 50-19,200	ASCII/ANSI 50-19,200	ASCII 50-19,200	ASCII/ANSI 75-38,400
Format	Char./line/block	Char./line/block	Character	Char./line/block	Character
Multipoint operation	No	No	No	No	No
Terminal interface	RS-232-C	RS-232-C std., RS-	RS-232-C std., RS-	RS-232-C std.; 20mA,	RS-232-C std.; 20n
Integral modem	Opt.	422, 20mA opt. No	422, 20mA opt.	RS-422 opt. No	RS-422 opt. No
Integral acoustic coupler	No.	No	No	No	No
PRICING AND AVAILABILITY		l			
Display station, purchase	1,395	395	545	699	695
Controller, purchase Monthly prime-shift maintenance	24		<u> </u>	_	
Annual prime-shift maintenance	1=				
Date of announcement	11/82	7/84	2/85	11/83	5/85
Date of first production delivery	11/82	8/84	4/85	12/83	8/85
Display units installed to date	Contact would :	20,000 Forsit Donat Ro	500	60,000	1,000
Serviced by	Contact vendor	Esprit Depot Re-	Esprit Depot Re-	Esprit Depot Re-	Esprit Depot Re-
COMMENTS	Full data entry	pair, TRW	pair, TRW	pair, TRW Upgradeable to	pair, TRW
	check. & forms capa.			standalone PC	1
	downline load, char.				
	fonts, line drawing				
	set, fold-up kybd.				I
	All feat. & controls settable from kybd.				1
	& saveable in non-				1
		1	ı	İ	1
	volatile RAM.	1 .	İ		

Maximum displays/controller Transportability Transportability Teletype compatibility Teletype compatibility Teletype compatibility Teletype compatibility Teletype compatibility Teletype compatibility Teletype compatibility SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Esprit III Color Standalone No No Std. TeleVideo 950 1920 24x80 plus status line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No Dim std. Std. No No	Standalone No 5251 Std. 1920 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std.	Standalone No 3278 Std. 1920 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No	Standalone No No Std. DEC VT100/VT52, TeleVideo 925, ANSI 1920, 3168 2 pages 24x80/132 plus status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt. No Opt.	Standalone No No Std. Lear Siegler ADM 3A, DEC VT52, AN 1920 2K std. 24x80 plus status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.; amber opt.
Standalone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility ISPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No No No Std. TeleVideo 950 1920 24x80 plus status line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No Dim std. Std. No No	No 5251 Std. 1920 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std.	No 3278 Std. 1920 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No	No No Std. DEC VT100/VT52, TeleVideo 925, ANSI 1920, 3168 2 pages 24x80/132 plus status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt. No	No No Std. Lear Siegler ADM 3A, DEC VT52, AN 1920 2K std. 24x80 plus status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
Transportability IBM compatibility Other compatibility Other compatibility Other compatibility Other compatibility ISPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Sclectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No Std. TeleVideo 950 1920 24x80 plus status line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No Dim std. Std. No	5251 Std. — 1920 — 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std. Std.	3278 Std. 1920 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No	No Std. DEC VT100/VT52, TeleVideo 925, ANSI 1920, 3168 2 pages 24x80/132 plus status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt.	No Std. Lear Siegler ADM 3A, DEC VT52, AN 1920 2K std. 24x80 plus status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
IBM compatibility Teletype compatibility Teletype compatibility Other compatibility ISPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No Std. TeleVideo 950 1920 24x80 plus status line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No Dim std. Std. No	5251 Std. — 1920 — 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std. Std.	3278 Std. 1920 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No	No Std. DEC VT100/VT52, TeleVideo 925, ANSI 1920, 3168 2 pages 24x80/132 plus status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt.	No Std. Lear Siegler ADM 3A, DEC VT52, AN 1920 2K std. 24x80 plus status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
Teletype compatibility Other compatibility Other compatibility Other compatibility ISPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Std. TeleVideo 950 1920 24x80 plus status line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No Dim std. Std. No No	Std. 1920 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std.	Std. — 1920 — 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No	Std. DEC VT100/VT52, TeleVideo 925, ANSI 1920, 3168 2 pages 24x80/132 plus status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt. No	Std. Lear Siegler ADM 3A, DEC VT52, AN 1920 2K std. 24x80 plus status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
Other compatibility ISPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. of char. Memory capacity, no. of char. Screen arrangement, lines x char./line Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Sclectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	TeleVideo 950 1920 24x80 plus status line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No Dim std. Std. No	1920 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std.	1920 24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No	DEC VT100/VT52, TeleVideo 925, ANSI 1920, 3168 2 pages 24x80/132 plus status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt.	Lear Siegler ADM 3A, DEC VT52, AN 1920 2K std. 24x80 plus status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
ISPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	1920 24x80 plus status line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No Dim std. Std. No No	24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std.	24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No	TeleVideo 925, ANSI 1920, 3168 2 pages 24x80/132 plus status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt. No	3A, DEC VT52, AN 1920 2K std. 24x80 plus status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
Display capacity, no. of char. Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	24x80 plus status line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No Dim std. Std. No No	24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std.	24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No	1920, 3168 2 pages 24x80/132 plus status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt. No	2K std. 24x80 plus status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	24x80 plus status line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No Dim std. Std. No No	24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std.	24x80 plus status line 12 Std. 124 ASCII 7x10 dot matrix P146 green No	2 pages 24x80/132 plus status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt. No	2K std. 24x80 plus status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
Screen arrangement, lines x char./line Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No No Dim std. Std. No	line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std.	line 12 Std. 124 ASCII 7x10 dot matrix P146 green No	24x80/132 plus status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt. No	24x80 plus status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Praging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	line 13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No No Dim std. Std. No	line 12 Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std.	line 12 Std. 124 ASCII 7x10 dot matrix P146 green No	status line 14 Std. 128 7x9 dot matrix P31 green std.; amber opt. No	status line 12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	13 Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No Dim std. Std. No	12 Std. 124 ASCII 7x10 dot matrix P146 green No No	12 Std. 124 ASCII 7x10 dot matrix P146 green No	14 Std. 128 7x9 dot matrix P31 green std.; amber opt. No	12 std.; 15 opt. Std. 128 7x9 dot matrix P31 green std.;
Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Tilt std. 128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No No Dim std. Std. No	Std. 124 ASCII 7x10 dot matrix P146 green No No Std. Std.	Std. 124 ASCII 7x10 dot matrix P146 green No	Std. 128 7x9 dot matrix P31 green std.; amber opt. No	Std. 128 7x9 dot matrix P31 green std.;
Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blink Blank Bold Reverse Double size Scroll Praging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	128 ASCII + graph. 7x11 dot matrix Green 8 colors std. Std. No No No Dim std. Std. No	7x10 dot matrix P146 green No No Std. Std.	7x10 dot matrix P146 green No No	7x9 dot matrix P31 green std.; amber opt. No	128 7x9 dot matrix P31 green std.;
Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Green 8 colors std. Std. No No Dim std. Std. No	P146 green No No Std. Std.	P146 green No No	P31 green std.; amber opt. No	P31 green std.;
Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blink Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	8 colors std. Std. No No No Dim std. Std. No	No No Std. Std.	No No	amber opt. No	
Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Std. No No No Dim std. Std. No No	No Std. Std.	No	No	lamber ont.
Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Std. No No No Dim std. Std. No No	No Std. Std.	No		
Programmable field/char. highlighting via: Underline Blink Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No No No Dim std. Std. No No	Std. Std.			No No
Underline Blink Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No No Dim std. Std. No No	Std.	lo	Opt.	NO
Blink Blank Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No No Dim std. Std. No No	Std.	Std.	Std.	No
Blank Bold Fleverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No Dim std. Std. No No		Std.	Std.	No
Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Dim std. Std. No No	No	No	Std.	Std.
Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No No	Std.	Std.	Std.	No
Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No	Std.	Std.	Std.	No
Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys		No	No	Std.	No
Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No	No No	No No	Up/down std.	Up/down std.
Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	No Std.	Std.	Std.	Std.	Std.
Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Both std.	Both std.	Both std.	Std.	Std.
Split screen/windows Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Std.	Std.	Std.	Std.	No
Tabulation Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Std.	Std.	Std.	Std.	No
Character insert/delete Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Std.	Std.	Std.	Std.	No
Line insert/delete Erase EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Std.	Std.	Std.	Std.	Std.
Erase L EYBOARD PARAMETERS Style T Character/code set Detachability S Program function keys	Std. Std.	No Std.	No Std.	Std.	No No
SYBOARD PARAMETERS Style Character/code set Detachability Program function keys	Sid. Line/screen	Line/screen std.	Line/screen std.	Std.	No
EYBOARD PARAMETERS Style Character/code set Detachability Program function keys	std.	Line/screen stu.	Line/screen sta.	Stu.	100
Character/code set Detachability Program function keys	ota.	I			
Detachability Program function keys	Typewriter	Typewriter (IBM	Typewriter (IBM	Typewriter	Typewriter
Detachability Program function keys	**	5251-style)	3278-style)	1	''
Program function keys	128 ASCII	124 ASCII	124 ASCII	128 ASCII	128 ASCII
	Std.	Std.	Std.	Std.	Std.
Numeric keypad	22 std.	8 std.	12 Std.	50 std.	12 std.
	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES	Ota.	10.0.	Jona.	Journ 1	0.0.
	No	No	No	No	No
	No	No	No	No	No
	No	No	No	Opt.	Opt.
Port for custsupplied devices Other vendor-supplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices				_	
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
	TTY	ACCII	ACCII	ASCII/ANSI X3.64	ASCII
	ASCII 50-19,200	ASCII 110-19,200	ASCII 110-19,200	ASCII 50-19,200	ASCII 50-19,200
	50-19,200 Char./block	Block	Block	Char./line/block	Char./line/block
· · · · · · · · · · · · · · · · · ·	No	No	No	No	No
	RS-232-C or 20mA	RS-232-C or 20mA	RS-232-C or 20mA	RS-232-C std.;	RS-232-C
		1	l .	RS-422 opt.	
	No	No	No	Opt.	No
	No	No	No	No	No
RICING AND AVAILABILITY Display station, purchase	995	1,095	1,150	795	640
a ' 'u 'i 'i 'i 'i 'i 'i 'i 'i 'i 'i 'i 'i 'i		1,090	1,130	/30	
Monthly prime-shift maintenance	_	_	_	_	
Annual prime-shift maintenance -			l—	_	
Date of announcement [5	5/83	5/83	5/83	9/83	9/83
Date of first production delivery Display units installed to date				11/83	11/83
	Esprit, TRW	Esprit, TRW	Esprit, TRW	Dow Jones, factory	Dow Jones, factory
OMMENTS		Emulates IBM 5251 when used with protocol converter	Emulates IBM 3278 Model 2 when used with protocol converter		

VENDOR AND MODEL	Falco 500	General Business Technology 7700DS	General Digital VuePoint	General Digital VuePoint II	Harris H178-02
ERMINAL DESCRIPTION		0. 44	0	C	QI
Standalone or cluster Maximum displays/controller	Standalone	Standalone	Standalone	Standalone	Cluster 32
Fransportability	No	No	Portable case	No	No
BM compatibility	No	5250	Special order	Special order	3178
Teletype compatibility	Std.	No	Opt.	Opt.	No
Other compatibility	See comments; ANSI X3.64				
SPLAY PARAMETERS	73.04				
Display capacity, no. of char.	1920-5016	1920	480	480	1920
Memory capacity, no. char./lines/pages	2 pp. std.; 4 opt.		128K opt.	143K opt.	1 page
Screen arrangement, lines x char./line	24/38x80/132 plus status line	25x80	12×40	12x40	24x80 plus status line
Screen area (diagonal), inches	14	14	10	10	12
Filt/swivel screen	Std.	Std.	No	No	Std.
Total displayable symbols	128	151	96 ASCII	96 ASCII	96 EBCDIC
Symbol formation Character phosphor	10x10/15 cell P167 white std.;	7x9 dot matrix P31 green or amber	5x7 dot matrix Gas plasma panel	5x7 dot matrix Orange or green gas	9x14 dot matrix P39/P42 green, or
Sharacter phosphor	green, amber opt.	1 3 i green or amber	das plasifia pariei	plasma	PC166 amber
Color capability	No	No	No	No	No
Graphics	No	No	No (or limited)	No (or limited)	No
Programmable field/char. highlighting via: Underline	Std.	Std.	No	No	No
Blink	Std.	Std.	Std.	Std.	No
Blank	Std.	Std.	Std.	Std.	Std.
Bold	No	Std.	Std.	Std.	Std.
Reverse	Std.	Std.	No	No	No
Double size Scroll	Std. Std.	No Std.	No Up std.	No Up std.	No No
Paging	2 std.; 4 opt.	No	3 std.;up to 51 opt.	3 std., up to 143	No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Std.	Std.	Addressable only	Addressable only	Std.
Protected format Partial screen transmit	Std. Std.	Std. Std.	Std. No	Std. No	Std. Std.
Split screen/windows	6 windows	No	No No	No No	No
Fabulation	Std.	Std.	Fwd. std.	Forward std.	Std.
Character insert/delete	Std.	Std.	No	No	Std.
_ine insert/delete	Std.	Std.	No	No	Std.
Erase	Std.		Char./line/screen/ partial screen std.	Char./line/screen/ partial screen std.	Char./line/screen
EYBOARD PARAMETERS			partial screen stu.	partial screen stu.	
Style	Typewriter	IBM 5250-compatible	Opt. (Typewriter)	Opt.	Typewriter, data
26	1.000	(typewriter)	400 400"	400 400"	entry, 96 EBCDIC
Character/code set Detachability	ASCII Std.	IBM 5291 set Std.	128 ASCII Std.	128 ASCII Std.	Std.
Program function keys	16 std. (64 func-	24 std.	Via touchscreen	Via touchscreen	Up to 24
,	tions)				
Numeric keypad	Std.	No	Via touchscreen	Via touchscreen	Opt.
NCILLARY DEVICES Serial printer, type, and speed	No	200 cps impact	No	No	Impact, various
Line printer, type, and speed	No		No	No	Planned
Composite video	No	No	No	No	No
Port for custsupplied devices	Std.	Opt.	Std.; 2 I/O ports	Std., 2 I/O ports	Std.
Other vendor-supplied devices		Opt. mouse	Audible alarm std.	Audible alarm std., self-test diag-	Light pen
		,		nostics	
	l				
RANSMISSION PARAMETERS	Half/full disch	Holf /full domina	Full duple:	Full duple:	Holf duraless
Mode Technique	Half/full-duplex Asynchronous	Half/full-duplex Synchronous	Full-duplex Asynchronous	Full-duplex Asynchronous	Half-duplex Synchronous
Communications protocol	ANSI X3.64	BSC, SNA/SDLC			BSC, SNA/SDLC
Code	ASCII	EBCDIC	ASCII	ASCII	EBCDIC
Speed, bits/second	Up to 38,400	1M	300-19,200	300-19,200	2.3M
Format Multipoint operation	Char./block	Char./line/block	Character	Character	Character
viuitipoint operation Terminal interface	No RS-232-C & RS-422	Std. Twinax (IBM 5250)	Opt. RS-232-C or 20mA	Opt. RS-232-C, RS-422/3,	No Coaxial
	std.	. WIIIGA (IDIVI 3230)	202 0 01 2011A	RS-485, 20mA, TTL	- Cuniul
ntegral modem	No	No	No	No	No
ntegral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY Display station, purchase	795	1,450	3,920	1,767	1,524
Controller, purchase		-,,-00	-		
Monthly prime-shift maintenance					12
Annual prime-shift maintenance	1.05	105		I—	134
Date of announcement Date of first production delivery	11/85	_	9/79	1/84 1/84	7/85 11/85
Date of first production delivery Display units installed to date	11/85	<u></u>			1.1/00
Serviced by	Dow Jones, factory	ITT Servcom	General Digital	General Digital	Harris
ORANAENITO	Commediate costs		The Vive Delies	OFM torrest	Dom of Ob-"
OMMENTS	Compatible with: Digital VT220/	User-programmable up to 224 char-	The VuePoint is a touch-input	OEM targeted; options include ex-	Part of Challenger Information Display
	VT100/VT52, ADDS	acters	terminal with	pansion memory,	System; attaches
	Viewpoint, Wyse	1	optional keyboard &	power & memory ass-	to Harris H174
	WY-50, TeleVideo		printer	emblies, battery	control units &
	955, 950, 925, 920,			backed-up memory,	equivalent IBM
	& 910, Hazeltine 1500			19-inch rackmount panel	controllers
	1.500	1		Pullel	1

VENDOR AND MODEL	Harris H180-14/15	Harris H179-01	Hewlett-Packard 2392A	Hewlett-Packard 2393A	Hewlett-Packar 2394A
ERMINAL DESCRIPTION					
Standalone or cluster	Cluster	Cluster	Standalone	Standalone	Standalone
Maximum displays/controller Fransportability	32 No	32 No	No	No	No
BM compatibility	3180	3179	No	No	No
Teletype compatibility	No	No	Std.	Std.	Std.
Other compatibility	_		ANSI	Tektronix 4010/4014 ANSI X3.64	ANSI X3.64
ISPLAY PARAMETERS				ANSI A3.04	
Display capacity, no. of char.	1920-3564	1920	1920	1920	1920
Memory capacity, no. char /lines/pages Screen arrangement, lines x char /line		1 page	4 pages std., 8 opt 24x80	12 pages 24x80	8 pages 24x80
Screen arrangement, lines x char./line	plus status line	status line	24x60	24x00	24x60
Screen area (diagonal), inches	14 or 15	14	12	12	12
Tilt/swivel screen	Std. 96 EBCDIC	Std. 96 EBCDIC	Std. 128 ASCII	Std. 128 ASCII	Std. 128 ASCII
Total displayable symbols Symbol formation	12x16/13/10, 9x12	9x14 dot matrix	9x14 dot matrix	8x14 dot matrix	9x14 dot matrix
Character phosphor	P39/P42 green, or	Color	P31 green	P31 green std.	P31 green std.
0.1	PC166 amber				
Color capability Graphics	No No	7 colors std. No	No No	No Std.	No No
Programmable field/char. highlighting via:	""	110		J	
Underline	Std.	Std.	Std.	Std.	Std.
Blink Blank	Std. Std.	Std.	Std. Std.	Std. Std.	Std. Std.
Bold	Std. Std.	Std. Std.	No	Sta. No	No
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	No	No	Std.	Std.	Std.
Scroll Paging	Up/down std.	No No	Up/down smooth std. 4 std., 8 opt.	Up/down, smooth 12 std.	Up/down, smooth 8 std.
raging Selectable cursor blinking	Std.	Std.	No	Std.	No
Addressable/readable cursor	Std.	Std.	Both std.	Both std.	Both std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit Split screen/windows	Std. No	Std. No	Std. No	Std. No	Std. No
Tabulation	Std.	Std.	Fwd./back std.	Fwd./back std.	Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete Erase	Std. Char./line/screen	Std. Std.	Std. Char./line/screen	Std. Char./line/screen	Std. Char./line/screen
LIUGO	C. 101 . / 11110 / SCI 8811	J.u.	std.	std.	std.
EYBOARD PARAMETERS					
Style	Typewriter data en- try, API 96 EBCDIC	Typewriter, data entry, APL	Typewriter	Typewriter	Typewriter
Character/code set	ASCII/EBCDIC	96 EBCDIC	128 ASCII	128 ASCII	128 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	24 Std.	24 std.	8 std.	12 std.	8 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES			1	[
Serial printer, type, and speed	Impact, various	Impact, various	RS-232-C or Centr.	RS-232-C or Centr.	RS-232-C or Centr.
Line printer, type, and speed Composite video	Planned No	Planned No	No No	No No	No No
Port for custsupplied devices	Std.	Std.	Opt.	Opt.	Opt.
Other vendor-supplied devices	Light pen	Light pen	_		_
RANSMISSION PARAMETERS		11.16 4	E. B. danston	F. W. d	F. 11 -1 -1
Mode Technique	Half-duplex Synchronous	Half-duplex Synchronous	Full-duplex Asynchronous	Full-duplex Asynchronous	Full-duplex Asynchronous
Communications protocol	BSC, SNA/SDLC	BSC, SNA/SDLC	ASCII	ASCII	ASCII
Code	EBCDIC	EBCDIC	ASCII	ASCII	ASCII
Speed, bits/second	2.3M	2.3M	110-19,200 Char /line /block	110-19,200 Char /line/blook	110-19,200 Char (line (block
Format Multipoint operation	Character Std.	Character Std.	Char./line/block	Char./line/block	Char./line/block No
Terminal interface	Coaxial	Coaxial	RS-232-C	RS-232-C	RS-232-C
	l.,		N-		
Integral modem Integral acoustic coupler	No No	No No	No No	No No	No No
RICING AND AVAILABILITY	1.50	1.0	1.,0	1	
Display station, purchase	1,795	2,195	1,375	2,095	1,795
Controller, purchase	14	14			
Monthly prime-shift maintenance Annual prime-shift maintenance	14 156	14 156		_	
Date of announcement	3/85	3/85	6/84	6/85	6/85
Date of first production delivery	11/85	12/85	6/84	6/85	6/85
Display units installed to date Serviced by	Harris	— Harris			Hewlett-Packard
Del viced by	1 101115	1 101113	I I I I I I I I I I I I I I I I I I I	I IOWIGIT-I ackain	I ISWIELL-FACKAIU
OMMENTS	Part of Challenger	Part of Challenger	Compact display	Graphics terminal;	Data entry termina
	Information Display	Information Display	terminal designed	optional touch-	
	System; attaches to Harris H174	System; attaches to Harris H174	for a wide range of applications	screen, bar code reader, tablet,	
	control units &	control units &	approations	mouse	
	equivalent IBM	equivalent IBM			1
	controllers	controllers			
	Ī	Ī	I	1	I

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VENDOR AND MODEL	Hewlett-Packard 2397A	Honeywell VIP 7201	Honeywell VIP 7301/ 7303/7307	Honeywell VIP 7305	Honeywell VIP 7814
TERMINAL DESCRIPTION Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller		1			
Transportability	No	No	Ño	No	No
IBM compatibility	No	No	No	No	No
Teletype compatibility Other compatibility	Std. Tektronix 4010/4014	Std. Honeywell VIP	Std. Honeywell	No Honeywell VIP	No Honeywell VIP
Other companionity	ANSI X3.64	Thomas vil	Tioney won	Thomographic VIII	110110744011 711
DISPLAY PARAMETERS					
Display capacity, no. of char. Memory capacity, no. char./lines/pages	1920 12 pages	1920 80/24/1	2000 80/25/1	2000 80/25/1	2000 6K/72/3
Screen arrangement, lines x char./line	24x80	24x80	25x80	25x80	24x80
Screen area (diagonal), inches	12	12	12	12	12
Tilt/swivel screen Total displayable symbols	Std. 128 ASCII	Tilt opt. 96 ASCII/26 special	No 120	Tilt opt. 96 ASCII	Tilt opt. 106 ASCII/special
Symbol formation	8x14 dot matrix	7x11 dot matrix	7x9 dot matrix	7x8 upper/7x9 lower	7x9 dot matrix
Character phosphor	Color	P31 green std.	P31 green std.	P31 green	P31 green std.
Color capability	8 colors/from 64	No	No	No	No
Graphics	Std.			Std.	<u> </u>
Programmable field/char. highlighting via:	lord.	C. 4	C+1	C+4	
Underline Blink	Std.	Std. Std.	Std. Std.	Std. Std.	Std. Std.
Blank	Std.	No	Std.	Std.	Std.
Bold	No	No	No Sed	No	Std.
Reverse Double size	Std.	Std. No	Std. No	Std. No	Std. No
Scroll	Up/down, smooth	Up std.	Up/horiz. std.(7303)	Up/horizontal std.	Up/down std.
Paging	12 std.	No	No	No	3 std.
Selectable cursor blinking Addressable/readable cursor	Std. Both std.	Std. Both std.	Std. Both std.	Std. Both std.	Std. Both std.
Protected format	Std.	 	No	No	Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows Tabulation	No Fwd./back std.	No Std.	No Std.	No Fwd./back std.	2 std. Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Char./line/screen	Std.	Line/screen std.	Line/screen std.	Std.
KEYBOARD PARAMETERS					
Style	Typewriter	Typewriter	Typewriter, data entry, WP	Typewriter (multi- func., low-profile)	Typewriter
Character/code set	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	12 std.	7 std.	12 std.	12 dual std.	12 std.
Numeric keypad	Std.	Std.	Std. (7303/7307)	Std.	Std.
ANCILLARY DEVICES				.	1.00
Serial printer, type, and speed Line printer, type, and speed	RS-232-C or Centr.	No	No No	No No	100 cps impact Various dot matrix
Composite video	No	No	No	No	No
Port for custsupplied devices Other vendor-supplied devices	Opt.	Std.	No	No	No 10 terminal
Other veridor-supplied devices	_			_	cluster unit
TRANSMISSION PARAMETERS					
Mode	Full-duplex	Full-duplex	Half/full-duplex	Half/full-duplex	Half/full duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Synchronous
Communications protocol Code	ASCII ASCII	ASCII 7-bit	ASCII 7-bit ASCII	Honeywell VIP ASCII	Honeywell VIP
Speed, bits/second	110-19,200	300-19,200	300-19,200	300-19,200	2400-9600
Format	Char./line/block	Char./line/block	Character	Character	Block
Multipoint operation Terminal interface	No RS-232-C	No RS-232-C or RS-422A	No RS-232-C, RS-422A	No RS-232-C or RS-422	Std. RS-232-C
			20mA, or MIL-188C		1
Integral modem Integral acoustic coupler	No No	No No	No No	No No	No No
PRICING AND AVAILABILITY	140	110	110	1.10	'''
Display station, purchase	3,095	795	1,900	1,900	2,700
Controller, purchase Monthly prime-shift maintenance		20	20	20	25
Annual prime-shift maintenance	_	See comments	See comments	22 6/83	See comments
Date of announcement	9/85	12/82	4/81	6/83	11/82
Date of first production delivery Display units installed to date	9/85	2/83	7/81	8/83 1500	1/83
Serviced by	Hewlett-Packard	Honeywell	Honeywell	Honeywell	Honeywell
COMMENTS	Color graphics	Honorwell Custome	Honovayoli Cuctomo-	Multi-function box	Honeywell Customer
COMMENTS	Color graphics terminal; optional	Honeywell Customer Assistance Maint-	Honeywell Customer Assistance Maint-	Multi-function key- board w/special	Honeywell Customer Assisted Maint-
	touchscreen, bar	enance Program	enance Program	overlays; eligible	enance Program
	code reader, tablet, mouse	(CAMP) available at	(CAMP) available at \$40/year; separate/	for Customer Assis- ted Maintenance	(CAMP) available at \$115/year; hor-
	Lablet, Illouse	\$80/year	interchangeable	Program (CAMP);	izontal & vertical
			keyboards for stand-	choice of roll or	line drawing symbols
			ard conversational, WP, or data entry	non-roll keyboard w/adjustable tilt	std.; 100-line buff- er print adapter;
			applications	mechanism	1000-foot drive cap.
L	1	I	L	I	i

VENDOR AND MODEL	Honeywell VIP 7815	Honeywell VIP 7816	Honeywell VIP 7817	Honeywell VIP 7823/7831	Honeywell VIP 7824
FERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller Transportability	No	No	No	No	No
IBM compatibility	No	No	No	No	No
Teletype compatibility	No	No	No	No	NO
Other compatibility	Honeywell VIP	Honeywell VIP	Honeywell VIP	Honeywell VIP	Honeywell VIP
DISPLAY PARAMETERS	1				
Display capacity, no. of char.	2000	2000	2000	2000	2000
Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line	3 pages 24x80	3 pages 24x80	3 pages 24x80	3 pages 24x80 plus status	3 pages 24x80
Screen arrangement, lines x char./line	24,00	24,00	24,00	line	24,00
Screen area (diagonal), inches	15	12	15	12	12
Tilt/swivel screen	Tilt opt.	Tilt opt.	Tilt opt.	Tilt opt.	Tilt opt.
Total displayable symbols Symbol formation	96 ASCII 7x8 upper/7x9 lower	96 ASCII 7x8 upper/7x9 lower	96 ASCII 7x8 upper/7x9 lower	96 ASCII 7x8 upper/7x9 lower	96 ASCII 7x8 upper/7x9 lowe
Character phosphor	P31 green	P31 green	P31 green	P31 green	P31 green
Color capability	N.	Na	No	No	No
Graphics	No Std.	No Std.	Std.	Std.	Std.
Programmable field/char. highlighting via:					
Underline	Std.	Std.	Std.	Std.	Std.
Blink Blank	Std.	Std. Std.	Std. Std.	Std. Std.	Std. Std.
Bold	Std.	Std.	Std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	No	No	No	No	No
Scroll Paging	Up/down std.	Up/down std. 3 std.	Up/down std. 3 std.	Up/down std. 3 std.	Up/down std. 3 std.
Paging Selectable cursor blinking	3 std. Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Both std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows Tabulation	2 std. Fwd./back std.	2 std. Fwd./back std.	2 std. Fwd./back std.	2 std. Fwd./back std.	2 std. Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Std.	Std.	Std.	Std.	Std.
KEYBOARD PARAMETERS					
Style	Typewriter	Typewriter	Typewriter	Typewriter (multi-	Typewriter (multi-
	1			func., low-profile)	func., low-profile)
Character/code set Detachability	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128 ASCII Std.
Program function keys	Std. 12 dual std.	Std. 12 dual std.	Std. 12 dual std.	Std. 12 dual std.	12 dual std.
Trogram function Roys	12 dual sta.	1		i	
Numeric keypad	Std.	Std.	Std.	Std.	Std.
ANCILLARY DEVICES Serial printer, type, and speed	Dot matrix, impact	Dot matrix, impact	Dot matrix, impact	Dot matrix, impact	Dot matrix, impact
Line printer, type, and speed	Various dot matrix	Various dot matrix	Various dot matrix	Various dot matrix	Various dot matrix
Composite video	No	No	No	No	No
Port for custsupplied devices	No 10	No	No 10 terminal cluster	No	No
Other vendor-supplied devices	10 terminal cluster unit	10 terminal cluster unit	unit	10 terminal cluster unit	10 terminal cluster unit
TRANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Async./sync.	Async./sync.	Async./sync.	Asynchronous	Async./sync.
Communications protocol	Honeywell VIP	Honeywell VIP	Honeywell VIP	Honeywell VIP	Honeywell VIP
Code Speed, bits/second	ASCII 2400-9600	ASCIÍ 2400-9600	ASCII 2400-9600	ASCII 2400-9600	ASCII 2400-9600
Format	Block	Block	Block	Block	Block
Multipoint operation	Std.	Std.	Std.	Std.	Std.
Terminal interface	RS-232-C or RS-422A	RS-232-C or RS-422A	RS-232-C or RS-422A	RS-232-C or RS-422A	RS-232-C or RS-422
Integral modem	No	No	No	No	No
Integral acoustic coupler	No	No	No	No	No
PRICING AND AVAILABILITY	2 005	2 000	2.005	2.250	2 700
Display station, purchase Controller, purchase	3,095	2,800	3,095	2,350	2,700
Monthly prime-shift maintenance	30	25	30	25	25
Annual prime-shift maintenance	295	250	295	250	250
Date of announcement	5/84	10/84	10/84	6/83	10/84
Date of first production delivery Display units installed to date	8/84	1/85	1/85	8/83 Approx. 1500	1/85
Serviced by	Honeywell	Honeywell	Honeywell	Honeywell	Honeywell
•	•			1 '	1
COMMENTS	15-inch screen pro-	Multiple mode term-	Multiple mode term-	72-line scrolling; buffered printer	Multi-function
	vides large size characters & clear	inal; can emulate VIP 7705R or VIP	inal w/large screen emulates the VIP	adapter; visual &	capability; horiz- ontal & vertical
	graphics display;	7800 family; 16K	7705 or VIP 7800	form attributes may	line drawing sym-
	buffered 16K-byte	buffered printer	family; 16K buffer-	be stored in each	bols; 100-line
	printer adapter; 72	adapter; eligible	ed printer adapter;	position; multi-	buffer printer
	line vertical scrolling; eligible	for Customer Assis- ted Maintenance	eligible for Cust- omer Assisted	function keyboard w/application spec-	adapter; eligible for CAMP at \$115/
	for Customer Assist	Program (CAMP); 72-	Maintenance Program	ific software;	year
					1 /

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VENDOR AND MODEL	Honeywell VIP 7825	Honeywell VIP 7826	Honeywell VIP 7827	Honeywell VTS 7710	Human Designed Systems HDS200
TERMINAL DESCRIPTION			,		
Standalone or cluster	Standalone	Standalone	Standalone	Cluster	Standalone
Maximum displays/controller Transportability	No	No	No	No	No
IBM compatibility	No	No	No	No ·	No
Teletype compatibility Other compatibility	No Honeywell VIP	No Honeywell VIP	No Honeywell VIP	No Honeywell VIP	Std. DEC VT100
	,		,	,	
DISPLAY PARAMETERS Display capacity, no. of char.	2000	2000	2000	1920	1920, 3168
Memory capacity, no. char./lines/pages	3 pages	3 pages	3 pages		4 pp. std.; 8 opt.
Screen arrangement, lines x char./line	24x80	24x80	24x80	24x80	24x80/132
Screen area (diagonal), inches	15	12	15	12	15
Tilt/swivel screen Total displayable symbols	Tilt opt. 96 ASCII	Tilt opt. 96 ASCII	Tilt opt. 96 ASCII	Tilt std. 96 ASCII	Std. 128 ASCII/512 spec.
Symbol formation	7x8 upper/7x9 lower	7x8 upper/7x9 lower	7x8 upper/7x9 lower	8x12 dot matrix	9x14 dot matrix
Character phosphor	P31 green	P31 green	P31 green	P39 green	PLA amber std.; P31 green opt.
Color capability	No	No	No	No	No
Graphics Programmable field/char, highlighting via:	Std.	Std.	Std.		Opt.
Underline	Std.	Std.	Std.	No	Std.
Blink Blank	Std.	Std. Std.	Std. Std.	Std. Std.	Std.
Bold	Std.	Std.	Std.	No	Std.
Reverse Double size	Std. No	Std. No	Std. No	No No	Std.
Scroll	Up/down std.	Up/down std.	Up/down std.	No	Up/down, smooth
Paging Selectable cursor blinking	3 std. Std.	3 std. Std.	3 std. Std.	No No	4 std.; 8 opt. Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Both std.
Protected format Partial screen transmit	Std.	Std. Std.	Std.	Std. Std.	Std.
Split screen/windows	2 std.	2 std.	2 std.	No	4+4 viewports std.
Tabulation Character insert/delete	Fwd./back std.	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Std.	Std.	Std.	Char./line/screen	Char./line/screen
KEYBOARD PARAMETERS				stu.	stu.
Style	Typewriter (multi- func., low-profile)	Typewriter (multi- func., low-profile)	Typewriter (multi- func., low-profile)	Typewriter	Typewriter
Character/code set	128 ASCII	128 ASCII	128 ASCII	96 ASCII	128 ASCII
Detachability Program function keys	Std. 12 dual std.	Std. 12 dual std.	Std. 12 dual std.	Std. See comments	Std. 55 (110) std.
					1 ' '
Numeric keypad ANCILLARY DEVICES	Std.	Std.	Std.	Std.	Std.
Serial printer, type, and speed	Dot matrix, impact	Dot matrix, impact	Dot matrix, impact	100/160 cps impact	No
Line printer, type, and speed Composite video	Various dot matrix	Various dot matrix	Various dot matrix	220 lpm belt Std.	No Opt.
Port for custsupplied devices	No	No.	No	No	Std.
Other vendor-supplied devices	10 terminal cluster unit	10 terminal cluster unit	10 terminal cluster unit	_	Shared printer interface opt.
TRANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half-duplex	Half/full-duplex
Technique Communications protocol	Async./sync. Honeywell VIP	Async./sync. Honeywell VIP	Async./sync. Honeywell VIP	Synchronous Honeywell VIP	Asynchronous RS-232-C, XON/XOFF
Code	ASCIÍ	ASCIÍ	ASCIÍ	ASCIÍ	ASCII
Speed, bits/second Format	2400-9600 Block	2400-9600 Block	2400-9600 Block	Up to 9600 Block	75-19,200 Char./block
Multipoint operation	Std.	Std.	Std.	Std.	No
Terminal interface	RS-232-C or RS-422A	RS-232-C or RS-422A	RS-232-C or RS-422A	RS-232-C	RS-232-C std.; 20mA opt.
Integral modem	No	No	No	No	No
Integral acoustic coupler PRICING AND AVAILABILITY	No	No	No	No	No .
Display station, purchase	3,095	2,800	3,095	1,250	995
Controller, purchase Monthly prime-shift maintenance	30		30	4,535 63	19
Annual prime-shift maintenance	295	250	295	I —	115
Date of announcement Date of first production delivery	10/84 1/85	10/84 1/85	10/84 1/85	4/81 4/81	4/85 4/85
Display units installed to date	I		<u> </u>	l	
Serviced by	Honeywell	Honeywell	Honeywell	Honeywell	HDS service
COMMENTS	15-in. screen pro-	Multiple mode term- inal; emulates VIP	Multiple mode term-	Function codes	Non-volatile func-
	vides large charac- ters & clear graph-	7705R or VIP 7800	inal w/15-inch screen (56% larger	obtainable via con- trol key sequences	tion keys & config- uration; simultan-
	ics display; multi- function keyboard	family; can perform character mode, WP,	image than 12-in.); multi-function key-		eous communication w/multiple hosts;
		& data entry func.	board can perform		user defined windows
	designed to accept			1	
	application-specif-	on multi-function	char. mode, WP, &		(4) & viewports (4)

VENDOR AND MODEL	Human Designed Systems HDS200G	Human Designed Systems HDS201	Human Designed Systems HDS201G	lcot 700	lcot 701
ERMINAL DESCRIPTION					
Standalone or cluster Maximum displays/controller	Standalone	Standalone	Standalone	Standalone/cluster	Standalone/cluster
Transportability	No	No	No	No	No
BM compatibility	No	No	No	3278	3278
Teletype compatibility	Std.	Std.	Std.	No DEC VITAGO	No No
Other compatibility	DEC VT100, Tektron- ix 4010/4014	DEC VT100	DEC VT100, Tektron- ix 4010/4014	DEC VT100	DEC VT100
SPLAY PARAMETERS	IX 4010/4014		i		
Display capacity, no. of char.	1920, 3168	1920, 3168	1920, 3168	1920, 3696	560-3696
Memory capacity, no. char./lines/pages	4 pp. std.; 8 opt.	8 pages std.	8 pages std.	2400 20122	1440 14/05/00/4
Screen arrangement, lines x char./line	24x80/132	24x80/132	24x80/132	24x80, 28x132	14x40, 14/25/33/4 80, 17/31x64, 28x1
Screen area (diagonal), inches	15	15	15	12	14
Tilt/swivel screen	Std.	Std.	Std.	No	No
Total displayable symbols	128 ASCII/512 spec.	128 ASCII/APL/spec.	128 ASCII/APL/spec.	87 ASCII	87 ASCII
Symbol formation Character phosphor	9x14 dot matrix PLA amber std.;	9x14 dot matrix PLA amber std.;	9x14 dot matrix PLA amber std.;	Multiple P31 green	Multiple P31 green
Situation priosprior	P31 green opt.	P31 green opt.	P31 green opt.	1 0 1 groon	l o i groon
Color capability	No	No	No	No	No
Graphics	Std.	Opt.	Std.		_
Programmable field/char. highlighting via: Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold Bayerse	Std.	Std.	Std. Std.	Std.	Std.
Reverse Double size	Std. Std.	Std. Std.	Sta. Std.	Std. No	Std. No
Scroll	Up/down, smooth	Up/down, smooth	Up/down, smooth	No	No
Paging	4 std.; 8 opt.	8 std	8 std.	No	No
Selectable cursor blinking Addressable/readable cursor	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor Protected format	Both std. Std.	Both std. Std.	Both std. Std.	Addressable only Std.	Addressable only Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows	4+4 viewports std.	4+4 viewports std.	4+4 viewports std.	No	No
Tabulation	Fwd./back std.	Fwd./back std.	Fwd./back std.	Std.	Std.
Character insert/delete Line insert/delete	Std.	Std. Std.	Std. Std.	Std. Std.	Std. Std.
Erase	Char./line/screen	Char./line/screen	Char./line/screen	Std.	Std.
	std.	std.	std.		
EYBOARD PARAMETERS Style	Typewriter	Typewriter	Typewriter	Typewriter (IBM 3278-style)	Typewriter
Character/code set	128 ASCII	APL	APL	— Style,	
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	55 (110) std.	55 (110) std.	55 (110) std.	Std.	Std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES	Siu.	Siu.	Stu.	Stu.	Stu.
Serial printer, type, and speed	No	No	No	No	Std.
ine printer, type, and speed	No	No	No	No	
Composite video Port for custsupplied devices	Opt. Std.	Opt. Std.	Opt. Std.	Std. Opt.	Std. Opt.
Other vendor-supplied devices	Shared printer	Shared printer	Shared printer	орі. —	—
other temaer supplied devices	interface, joystick	interface opt.	interface, joystick		
	opt.	,	opt.		
RANGMISSION PARAMETERS					
RANSMISSION PARAMETERS Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Full-duplex	Full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Communications protocol	RS-232-C, XON/XOFF	RS-232-C, XON/XOFF	RS-232-C, XON/XOFF	Async, BSC, SNA/SDLC	
Code Speed, bits/second	ASCII 75-19,200	ASCII 75-19,200	ASCII 75-19,200	ASCII 110-19,200	ASCII 110-19,200
Speed, bits/second Format	75-19,200 Char./block	Char./block	Char./block	110-19,200 Character	Character
Multipoint operation	No	No	No	Std.	Std.
Terminal interface	RS-232-C std.;	RS-232-C std.;	RS-232-C std.;	RS-232-C or RS-422	RS-232-C or RS-42
Integral modem	20mA opt. No	20mA opt. No	20mA opt. No	No	No
Integral modern Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY	l				
Display station, purchase	1,295	1,295	1,595	1,095	1,750
Controller, purchase Monthly prime-shift maintenance	24	19	24	5,800-9,800	5,800-9,800
Annual prime-shift maintenance	150	115	150		
Date of announcement	4/85	4/85	4/85	1982	1982
Date of first production delivery	4/85	4/85	4/85	1982	1982
Display units installed to date Serviced by	HDS service	HDS service	HDS service	lcot	lcot
OMMENTS	Non-volatile func-	Non-volatile func-	Non-volatile func-	Built-in keypad	Built-in keypad
CIVIIVILIVIO	tion keys & config-	tion keys & config-	tion keys & config-	calculator, alter-	calculator, alter-
		uration; simultan-	uration; simultan-	nate application	nate application
	uration; simultan-				
	eous communication	eous communication	eous communication	sessions	sessions
	eous communication w/multiple hosts;	w/multiple hosts;	w/multiple hosts;	sessions	sessions
	eous communication w/multiple hosts; user defined windows	w/multiple hosts; user defined windows	w/multiple hosts; user defined windows	sessions	sessions
	eous communication w/multiple hosts;	w/multiple hosts;	w/multiple hosts;	sessions	sessions

VENDOR AND MODEL	Informer 101	Informer 201/203/205	Informer 207	Informer 376	Informer 378
FERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Either	Either	Standalone	Cluster
Maximum displays/controller	<u></u>	1(VT100);32(376)	1; 32; 8	No	8
Transportability IBM compatibility	No 3101	No IBM 3276/3278 BSC	Portable IBM 3276/3278	NO 3276	No 3278
Teletype compatibility	Std.	No	No	No	No
Other compatibility			DEC VT100, IBM 3101		<u> </u>
ISPLAY PARAMETERS					
Display capacity, no. of char.	1920	1920	1920	1920	1920
Memory capacity, no. char./lines/pages	80/24/1	4K	4K	80/24/1	80/24/1
Screen arrangement, lines x char./line	24x80	24x80 plus status line	24x80 plus status line	24x80 plus status line	24x80 plus status line
Screen area (diagonal), inches	9	11	11	9 std., 12 opt.	9 std., 12 opt.
Tilt/swivel screen	Std.	Tilt std.	Tilt std.	Std., 12 opt.	Std., 12 opt.
Total displayable symbols	128 ASCII	ASCII (VT100)	ASCII; full IBM set	96	96
Symbol formation	7x9 dot matrix	8x10 dot matrix	8x10 dot matrix	7x9 dot matrix	7x9 dot matrix
Character phosphor	P4 white std.; P31	P31 green std.	P31 green std.	P31 green std.,	P31 green std.;
0 - 1 1 184	green opt.	l.,		P4 white opt.	P4 white opt.
Color capability Graphics	No No	No No	No No	No No	No No
Grapnics Programmable field/char. highlighting via:	Ino	140	140	140	140
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold	Std.	Std.	Std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size Scroll	No Up/down std.	Std. (VT100 only) Up/down (VT100)	Std. (VT100 only) Up/down std. (VT100)	No No	No No
Scroll Paging	No	No	No	No No	No No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both std.	Std.	Std.	Both std.	Both std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows Tabulation	No	Std.	Std.	No	No
Tabulation Character insert/delete	Fwd./back std. Std.	Std. Std.	Std. Std.	Fwd./back std. Std.	Fwd./back std. Std.
Line insert/delete	Std.	No	No	No	No.
Erase	Char./line/screen	Std.	No	Char./line/screen	Char./line/screen
EYBOARD PARAMETERS	std.			std.	std.
Style	Data entry	Typewriter 201; Data	Typewriter	Data entry	Data entry
•	1	entry (203/205)		•	· ·
Character/code set	128 ASCII	ASCII(VT100); EBCDIC	ASCII(VT100); EBCDIC	96 EBCDIC	96 EBCDIC
Detachability	No	Std. on 203, 205	Std.	Opt.	Opt.
Program function keys	8 std.	18 (VT100); 24	18 (VT100); 24	24 std.	24 std.
Numeric keypad	No	Std. on some models	Std.	Std.	Std.
NCILLARY DEVICES	1	1.00			
Serial printer, type, and speed	No	120 cps	120 cps	30 cps dot matrix	30 cps dot matrix
Line printer, type, and speed Composite video	No Std.	No No	No No	No Std.	No Std.
Port for custsupplied devices	Opt.	Std.	Std.	Opt.	Opt.
Other vendor-supplied devices		Light pen	Light pen	Light pen	Light pen
RANSMISSION PARAMETERS	11-15/5-11	F. H. A	F. H. dami	11-16/61 -11	11-16/6-21 4
Mode Technique	Haif/full-duplex	Full-duplex	Full-duplex Async./sync.	Half/full-duplex Synchronous	Half/full-duplex Synchronous
Communications protocol	Asynchronous ASCII	Async./sync. ANSI (VT100); BSC	ASYNC./SYNC.	BSC	BSC
Code	ASCII	ASCII; EBCDIC	ASCII; EBCDIC	EBCDIC	EBCDIC
Speed, bits/second	50-19,200	38.4K (VT100); 19.2K	38.4K (VT100), 19.2K	50-9600	50-9600
Format	Character	Char. (VT100); block	Char. (VT100); block	Block	Block
Multipoint operation	Opt.	Std.(376 & 378 only)	Std.(376 & 378 only)	Std.	Std.
Terminal interface	RS-232-C or 20mA	RS-232-C; coax	RS-232-C; coax	RS-232-C	RS-232-C
Integral modem	No	(378 only) Opt.	(378 only) Opt.	Opt.	Opt.
Integral modern Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY	1	1	1	1	1
Display station, purchase	690	1,090-3,900	1,390-3,850	1,950-2,350	1,700-2,050
Controller, purchase		4,000 (378 only)	4,000 (378 only)	_	5,000-5,400
Monthly prime-shift maintenance		Contact vendor	Contact vendor		
Annual prime-shift maintenance Date of announcement		10/82	10/82		
Date of announcement Date of first production delivery	_	10/82 1/83	1/83		
Display units installed to date		1,700	1.700		
Serviced by	Informer	Informer	Informer	Informer	Informer
OMMENTS		Models available	Available with	Models I, D, and	Models I, D, and
CHANAICIA I G		with Informer	Informer VT100,	S, and 201-205,	S, and 201-205,
		VT100, 376, or	376, or 378	including execu-	including execu-
		378 software	software packages	tive inquiry with	tive inquiry with
		packages	1	hide-away keyboard	hide-away keyboar
					all models used
					with 374 controlle
			1		
	<u> </u>		<u> </u>		<u> </u>

VENDOR AND MODEL	Intecolor E 8001 G/H/R	Intecolor ColorTrend	Intecolor 2427	IBM 3101	IBM 3104
ERMINAL DESCRIPTION	Standala	Standals	Standala	Standalone	Either
Standalone or cluster Maximum displays/controller	Standalone	Standalone	Standalone 	Standalone	Either
Transportability	No	No	No	No	No
BM compatibility	3275 opt.	No	No	No	8775, 3276, 3278
Teletype compatibility Other compatibility	Std. No	Std. DEC VT100, ANSI	Std. Tektronix 4010 &	Std.	No
Other compatibility	INO	X3.64	4027		-
SPLAY PARAMETERS					
Display capacity, no. of char. Memory capacity, no. char./lines/pages	3840 80/48/2	1920 80/24/2	1920 80/24/2	1920	1920
Screen arrangement, lines x char./line	48x80	24x80	24x80	24x80 plus	24x80 plus
				status line	status line
Screen area (diagonal), inches	19	14	13	12	12 Std.
Tilt/swivel screen Total displayable symbols	No 64 ASCII/64 ISA	No 64 ASCII/64 ISA	No 64 ASCII	Std. 128 ASCII	94
Symbol formation	5x7 (G); 6x8 (H&R)	5x7 dot matrix	5x7 dot matrix	7x14 dot matrix	7x14 dot matrix
Character phosphor	Color	Color	Color	Green	White
Color conchility	8 colors	8 colors	8 of 64 colors	No	No
Color capability Graphics	Std.	Std.	Std.	No	No
Programmable field/char. highlighting via:	Ota.	0.0.		'''	
Underline	No	Std.	Std.	No	Std.
Blink	Std.	Std.	Std.	No	Std.
Blank Bold	No No	Std. Std.	Std. Std.	No No	Std. Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	Std.	No	No	No	No
Scroll	Up std.	Up/down std.	Up/down std.	No	Std.
Paging Selectable cursor blinking	2 opt. No	2 std. No	2 pages std.	No Std.	No Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Addressable	Both std.
Protected format	Opt.	No	No	Std.	Std.
Partial screen transmit	No	No	No	No	Std.
Split screen/windows Tabulation	No Fwd. std.	Std. Fwd./back std.	Std. Hori./ver.;f./b.std.	No Std.	Std. Std.
Character insert/delete	Std.	Std.	Std.	No.	Std.
Line insert/delete	Std.	Std.	Std.	No	Std.
Erase	Char. std.	Char./line/page	Char./line/page	Line/screen std.	Char./field/screen
EYBOARD PARAMETERS		std.	std.		std.
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter, data
•				1	entry
Character/code set	64 ASCII	64 ASCII	64 ASCII	ASCII	EBCDIC
Detachability Program function keys	Std. 16 std.	No 12 std.; 72 func-	Yes 12 or 24 opt.	Std. 8 std.	Std. 10 (Model B1); 24
rogram function keys	10 810.	tions	12 01 24 Opt.	o stu.	(Model B2)
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES				ļ.,	
Serial printer, type, and speed Line printer, type, and speed	55 cps impact opt.	55 cps impact opt.	55 cps impact opt.	No No	Std.
Composite video	No	No	No	No	No.
Port for custsupplied devices	RS-232-C	RS-232-C; 20mA opt.	RS-232-C; 20mA opt.	Std.	Std.
Other vendor-supplied devices	Light pen (H&R),	Light pen opt.	Light pen opt.		Audible alarm, key-
	digitizer (R),				lock, clock
	plotter (R) all optional				
RANSMISSION PARAMETERS					
<u>M</u> ode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique Communications protocol	Async.; sync. opt.	Asynchronous ANSI X3.64	Asynchronous ANSI X3.64	Asynchronous ASCII	Synchronous BSC/SDLC
Code	ASCII	ASCII, ANSI	ASCII, ANSI	ASCII	EBCDIC
Speed, bits/second	Up to 9600	Up to 19,200	Up to 19,200	110-9600	Up to 38,400
Format	Character	Character	Character	Character	Block
Multipoint operation Terminal interface	No RS-232-C std.; 20mA	No RS-232-C or 20mA	No RS-232-C or 20mA	No RS-232-C or	Std. Communication loc
terrimal interrace	opt.	no-232-C of ZulliA	NS-232-C OF ZUITA	RS-422-A	twisted-pair
Integral modem	No.	No	No	No	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY Display station, purchase	2 745/2 175/2 075	1,295	2,695	1,430	2,190-2,250
Controller, purchase	2,745/3,175/3,975 —				
Monthly prime-shift maintenance			 		
Annual prime-shift maintenance	4075 /4075 /4075	1-004		70-180	38-210
Date of announcement Date of first production delivery	1975/1979/1982	1984 1984	6/83 11/83	1979 1979	3/82
Date of first production delivery Display units installed to date					
Serviced by	Intecolor rep.,	Intecolor rep.,	Intecolor, service	IBM	IBM
•	service centers	service centers	centers	1	l
OMMENTS	Resolution—160 H			Model 13; all other	Model B1 equipped
	x 192 V; 480 H x 384 V (H&R); low			models (10, 12, 20, 22, 23) withdrawn	with 75-key data entry keyboard,
		i		from marketing	Model B2 equipped
	resolution character				
	resolution character cell graphics mode				with 87-key type-
					writer keyboard, fo

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VENDOR AND MODEL	IBM 3161	IBM 3163	IBM 3178	IBM 3179	IBM 3179-G
TERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Cluster 32	Cluster	Cluster 32
Maximum displays/controller Transportability	No	No	No	32 (Mod.1); 9 (2) No	No
IBM compatibility	3101	3101	3270 System	3270 (1); 5250 (2)	3270 System
Teletype compatibility Other compatibility	Std.	Std.	No	No	No
'	See comments	DEC VT100/VT52 (via opt. cartridge)	IBM 3278 Model 2	IBM 3279-S2A/S2B (1); 5292-1 (2)	IBM 3179/3279-S3G
DISPLAY PARAMETERS Display capacity, no. of char.	1920	1920	1920	1920	1920, 2560
Memory capacity, no. char./lines/pages	1920 char.	7680 char.	_		
Screen arrangement, lines x char./line	24x80 plus	24x80 plus	24x80	24x80	24/32x80
Screen area (diagonal), inches	status line 12	status line	12	14	14
Tilt/swivel screen	Std.	Std.	Std.	Std.	Std.
Total displayable symbols	128 ASCII	128 ASCII	94	94 EBCDIC	EBCDIC/APL/graphics
Symbol formation Character phosphor	8x16 dot matrix Green	8x16 dot matrix Green	7x14 dot matrix Green	7x14 dot matrix Color	720x384 pixels/APA Color
· ·					į
Color capability Graphics	No Line drawing set	No Line drawing set	No No	4/7 colors No	8 colors Std.
Programmable field/char. highlighting via:	Line drawing set				l
Underline	Std.	Std.	Std.	Std.	Std.
Blink Blank	Std. Std.	Std. Std.	Std. Std.	Std. Std.	Std. Std.
Bold	Std.	Std.	Std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size Scroll	No Up/down std.	Std. Up/down, smooth	No No	No No	No No
Paging	No	4 std.	No	No	No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor Protected format	Addressable Std.	Addressable Std.	Addressable only Std.	Addressable only Std.	Addressable only Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows	Std.	Std.	No	No	No
Tabulation Character insert/delete	Std. No	Std.	Std. Std.	Std. Std.	Std. Std.
Line insert/delete	No	Std.	No	No.	No .
Erase	Line/screen std.	Line/screen std.	Char./line/screen	Char./line/screen	Char./line/screen
KEYBOARD PARAMETERS					
Style	Typewriter	Typewriter	Typewriter, data	Typewriter, data	Typewriter, APL
Character/code set	ASCII	ASCII	entry EBCDIC	entry, APL EBCDIC	EBCDIC/APL
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	24 std.	24 std.	10/12 std.	24 std.	24 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
ANCILLARY DEVICES Serial printer, type, and speed	4201 Proprinter	4201 Proprinter	Std.	Std.	Std.
Line printer, type, and speed	No	No	No.	No.	No
Composite video	No	No	No	No	No
Port for custsupplied devices Other vendor-supplied devices	RS-232-C std.	Std.	Std. Audible alarm,	Std. Audible alarm,	Std. Color Jetprinter
Other verider supplied devices			security keylock	security keylock	screen printer,
					mouse, plotters via 3979 Expansion unit
TRANSMISSION PARAMETERS					3979 Expansion unit
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique Communications protocol	Asynchronous XON/XOFF	Asynchronous XON/XOFF	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC
Code	ASCÍI	ASCII	EBCDIC	EBCDIC	EBCDIC
Speed, bits/second	50-19,200	50-19,200	1200-9600	1200-9600	1200-9600
Format Multipoint operation	Char./block No	Char./block No	Block Std.	Block Std.	Block Std.
Terminal interface	RS-232-C or	RS-232-C or	Coaxial, twisted-	Coaxial, twinaxial,	Coaxial, twisted-
	RS-422-A	RS-422-A	pair	twisted-pair	pair
Integral modem Integral acoustic coupler	No No	No No	No No	No No	No No
PRICING AND AVAILABILITY	NO	140	No	140	NO .
Display station, purchase	695-774	1,095-1,174	1,660-1,720	2,295(1); 2,195(2)	2,995
Controller, purchase Monthly prime-shift maintenance			4,885-18,230	2,650-18,230	4,885-18,230
Annual prime-shift maintenance	35-55	40-70	63-252	85-135	133
Date of announcement	6/85	6/85	3/83	3/84	6/85
Date of first production delivery Display units installed to date	7/85	7/85		3/84	6/85
Serviced by	IBM	IBM	IBM	IBM	IBM
COMMENTS	Models 11 & 12;	Models 11 & 12; may	Part of 3270 Infor-	Available in two	Part of 3270 Infor-
	terminal emulations	be divided into 3	mation Display	models; Model 1 is	mation Display Sys-
1	include: ADDS	horizontal or	System; attaches to	part of 3270 Infor-	tem; attaches to
1	Viewpoint, Lear Siegler ADM 3A,	vertical viewports, utilizing a 7,680-	3274 or 3276 control unit; Models	mation Display System; Model 2 is	3274 or 3276 cont- rol unit; Models
	Hazeltine 1500, &	character data	C1, C2, C3, & C4	part of 5250 Infor-	G1 & G2; 3979
	TeleVideo 910	buffer		mation Display	Expansion Unit
				System; attaches to 3274, 3276, &	(\$295) provides auxiliary device
				5294 control units	ports
L	1	L	I	I	L

<u></u>					
VENDOR AND MODEL	IBM 3180	IBM 3276	IBM 3278	IBM 3279	IBM 3290
TERMINAL DESCRIPTION					
Standalone or cluster Maximum displays/controller	Either 32 (Mod.1); 9 (2)	Cluster 8	Cluster 32	Cluster 32	Cluster 32
Transportability	No	No	No	No	No
IBM compatibility Teletype compatibility	3270 (1); 5250 (2) No	3270 System	3270 System No	3270 System No	3270 System
Other compatibility	IBM 3278 (Model 1);	No —	INO		No —
	5251 (Model 2)				
DISPLAY PARAMETERS Display capacity, no. of char.	1920-3564(1); 1920	960-3440	960-3564	1920, 2560	5300, 9920
Memory capacity, no. char./lines/pages	l			<u> </u>	
Screen arrangement, lines x char./line	24/32/43x80, 27x132 (Mod.1); 24x80 (2)	12/24/32/43x80	12/24/32/43x80, 27x132	24/32x80	50x106, 62x160
Screen area (diagonal), inches	15	14	14	14	10.7 x 13.4
Tilt/swivel screen Total displayable symbols	Std. 94 EBCDIC	No	No 64/96 EBCDIC; 120APL	No	Tilt_std. 64/96 EBCDIC; 120APL
Symbol formation	8x8/8x11 dot matrix	7x11/7x14 dot matrix	7x12/7x14 dot matrix	9x12 dot matrix	5x8/7x9 dot matrix
Character phosphor	Green	White	White	Color	Amber gas plasma
Color capability	No	No	No	4/7 colors	No
Graphics	No	No	No	Opt.	No
Programmable field/char. highlighting via: Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold Reverse	Std. Std.	Std. Std.	Std. Std.	Std. Std.	Std. Std.
Double size	No	No	No	No	No
Scroll	No No	No No	No No	No No	Std. No
Paging Selectable cursor blinking	Std.	No	Std.	Std.	Std.
Addressable/readable cursor	Addressable only	Addressable only	Addressable only	Addressable only	Addressable only
Protected format Partial screen transmit	Std. Std.	Std. Std.	Std. Std.	Std. Std.	Std. Std.
Split screen/windows	No	No	No	No	Up to 16 partitions
Tabulation	Std.	Std.	Std.	Std.	Std.
Character insert/delete Line insert/delete	Std. No	Std. No	Std. No	Std. No	Std. No
Erase	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen
VEVECARD BARAMETERS	std.	std.	std.	std.	std.
KEYBOARD PARAMETERS Style	Typewriter, data	Typewriter, data	Typewriter, data	Typewriter, data	Typewriter, APL
•	entry	entry, APL	entry, APL	entry, APL	
Character/code set Detachability	EBCDIC Std.	EBCDIC Std.	EBCDIC Std.	EBCDIC Std.	EBCDIC Std.
Program function keys	24 std.	12/24 std.	12/24 std.	10-12 std.	24 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
ANCILLARY DEVICES					
Serial printer, type, and speed	Std.	Std.	Std.	Std.	Std.
Line printer, type, and speed Composite video	No ·	No No	No No	No No	No No
Port for cust -supplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices		Audible alarm, mag. slot reader, light	Audible alarm, mag. slot reader, light	Audible alarm, mag- netic slot reader,	Audible alarm, security keylock
		pen, keylock	pen, keylock, I.D.	light pen, keylock	Security Reviock
TRANSMISSION PARAMETERS			reader	4	
Mode	Half/full-duplex	Half/full duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Communications protocol Code	BŚC, SNA/SDLC EBCDIC	BŚC, SNA/SDLC EBCDIC	BŚC, SNA/SDLC EBCDIC	BŚC, SNA/SDLC EBCDIC	BSC, SNA/SDLC EBCDIC
Speed, bits/second	1200-9600	1200-9600	1200-9600	1200-9600	1200-9600
Format Adulting int apprecian	Block	Block	Block	Block	Block
Multipoint operation Terminal interface	Std. Coaxial, twinaxial,	Std. Coaxial, twisted-	Std. Coaxial, twisted-	Std. Coaxial, twisted-	Std. Coaxial, twisted-
	twisted-pair	pair	pair	pair	pair
Integral modem Integral acoustic coupler	No No	No No	No No	No No	No No
PRICING AND AVAILABILITY					
Display station, purchase	2,295(2); 2,195(1)	5,380-5,830	1,855-2,575	3,160-5,190	7,100
Controller, purchase Monthly prime-shift maintenance	2,650-18,230 —	Included 30.50-32.00	4,885-18,230 10.00-12.50	4,885-18,230 16.50-25.00	4,885-18,230 30
Annual prime-shift maintenance	69-135				210
Date of announcement Date of first production delivery	3/84 3/84	1977 1977	1977 1978	10/79 10/79	3/83
Display units installed to date				<u> </u>	
Serviced by	IBM	IBM	IBM	IBM	IBM
COMMENTS	Available in two	Control unit/display	Part of 3270 Infor-	Part of 3270 Infor-	Part of 3270 Infor-
	models; Model 1 is	station; part of	mation Display	mation Display Sys-	mation Display
	part of 3270 Infor- mation Display	3270 Information Display System;	System; attaches to 3274 & 3276	tem; attaches to 3274 or 3276	System; attaches to 3274 control
	System; Model 2 is	supports up to 7	control units	control unit	unit
	part of 5250 Infor- mation Display	additional devices			
	System; Model 1				
	features multiple				
<u> </u>	display capacities				

VENDOR AND MODEL	IBM 5251	IBM 5291/5292	IBM 8775	ITT Courier 1700	ITT Courier 1778
RMINAL DESCRIPTION					
standalone or cluster	Either	Either	Either	Cluster	Cluster
Maximum displays/controller	Up to 9	Up to 9	 	32	32
ransportability BM compatibility	No 5250 System	No 5251-11	No Std.	No 3178	No 3178
eletype compatibility	No	No	No.	No	No
Other compatibility	-	-	_		_
SPLAY PARAMETERS				4	
Display capacity, no. of char.	1920	1920	960-3440	1920 1920 char.	1920
Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line	24x80	24x80 plus	12/24/32/43x80	24x 80	1920 char. 24x 80
-		status line	1 ' ' '	40	
creen area (diagonal), inches Tilt/swivel screen	12 No	12 Tilt std.	12 Tilt std.	12 Std.	12 Std.
otal displayable symbols	96 EBCDIC; 188 opt.	96 EBCDIC	96	94 EBCDIC/ASCII	94 EBCDIC/ASCII
symbol formation	8x16 dot matrix	7x11 dot matrix	9x12/9x16 dot matrix	7x8 dot matrix	7x8 dot matrix
Character phosphor	White	White	White	Green	Green or amber
color capability	No	7 colors (5292)	No	No	No
Graphics Programmable field/char. highlighting via:	No	No	No	No	No
Underline	No	Std.	Std.	Std./opt.	Std./opt.
Blink	No	Std.	Std.	Std./opt.	Std./opt.
Blank Bold	No No	Std. Std.	No No	No No	No No
Reverse	No Std.	Std.	Std.	No No	No No
Double size	No	No	No	No	No
Geroll	Std.	Std.	Std.	No	No
aging Selectable cursor blinking	No Std.	No Std.	No Std.	No Std.	No Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Both std.
rotected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows Sabulation	No Std.	No Std.	Std. Std.	No Fwd./back std.	No Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
ine insert/delete	No	No	Std.	No	No
rase	Char./field/screen	Char./field/screen std.	Char./field/screen	Char./line/screen	Char./line/screen
YBOARD PARAMETERS	Jatu.	Janu.		,	
Style	Typewriter	Typewriter	Typewriter, data	Typewriter, data	Typewriter, data
Character/code set	EBCDIC	EBCDIC	entry EBCDIC/APL	entry 94 EBCDIC/ASCII	entry 94 EBCDIC/ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	24 std.	24 command	Std. (various)	24 std.	24 std.
lumeric keypad	Std.	functions Std.	Std.	Opt.	Opt.
NCILLARY DEVICES	Sta.	Sta.	510.	Орт.	Орт.
Serial printer, type, and speed	Std.	Std.	Std.	Up to 400 cps	Up to 400 cps
ine printer, type, and speed	No	No	Std.	300/600 lpm	300/600 lpm
Composite video Port for custsupplied devices	No Std.	No Std.	No Std.	No No	No No
Other vendor-supplied devices	Mag. stripe reader,	Mag. stripe reader,	Audible alarm, key-	<u> </u>	
	selector light pen,	selector light pen,	lock, clock		
	aud. alarm, keylock	keylock			
RANSMISSION PARAMETERS			1		
Mode	Half/full duplex	Half/full duplex	Half/full-duplex	Half-duplex	Half-duplex
Fechnique Communications protocol	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC
Code	EBCDIC	EBCDIC	EBCDIC	EBCDIC	EBCDIC
Speed, bits/second	1200-9600	1200-9600	Up to 38,400	Up to 19,200	Up to 19,200
ormat Multipoint operation	Block	Block	Block Std.	Block	Block
viuitipoint operation Ferminal interface	Std. Twinaxial, twisted-	Std. Twinaxial, twisted-	Communication loop,	Std. Coaxial	Std. Coaxial
	pair	pair	twisted-pair		
ntegral modem	Opt.	Opt.	No	No	No
ntegral acoustic coupler RICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	2,135-3,040	1,850/4,950	2,965-3,450	1,300	1,300
Controller, purchase	2,650	2,650	<u> </u>	5,700 & up	5,700 & up
Monthly prime-shift maintenance Annual prime-shift maintenance	18.50-40.00	105/357	20.00-24.50		
Annual prime-snift maintenance Date of announcement	1977	7/82	10/78	<u> </u>	3/85
Date of first production delivery	1978	- -	8/79	1983	1st Q/85
Display units installed to date Serviced by	IBM	IBM	IBM	ITT Courier	ITT Courier
•	IDIVI	IOIVI	IDIVI	Courier	Couner
OMMENTS	Part of 5250 Infor-	5291 is a mono-	Workstation for IBM	Part of 9000	Part of 9000
	mation Display	chrome terminal;	8100 Information	Series; connects to	Series; connects t
	System; 5251-11 is remote cluster	5292 is a color version; part of	System; also at- taches to 4331	ITT Courier 94XX controllers	ITT Courier 94XX controllers; also
	or local station;	5250 Information	processor, 4300 &		connects to IBM
	5251-12 is remote	Display System;	S/370		3274/3276 contr
	cluster controller/ station; attach to	attach to 5294 control unit		1	lers

VENDOR AND MODEL	ITT Courier 1900	ITT Courier 9230/9232	ITT Courier 9236	ITT Qume QVT 101	ITT Qume QVT 103
RMINAL DESCRIPTION					
tandalone or cluster	Cluster	Cluster	Cluster	Standalone	Standalone
faximum displays/controller	32	32		l—	
ransportability	No	No	No	No	No
BM compatibility	3179	3180/3278	3279	No	No
eletype compatibility	No	No	No	Std.	Std.
ther compatibility		<u> </u>	_	TeleVideo 910, Haz. 1500, LSI ADM 3A/5	DEC VT100/132,
SPLAY PARAMETERS		Į.		1500, LSI ADIVI 3A/5	VT52
isplay capacity, no. of char.	1920	1920-3564	1920, 2560	1920	1920, 3168
lemory capacity, no. char./lines/pages	1920 char.	1920-3564 char.	1920 or 2560 char.		2 pages std.
creen arrangement, lines x char./line	24x80	24/32/43x80,	24/32x80	24x80 plus status	24x80/132
		27x132	1	line	'
creen area (diagonal), inches	14	15	14	14	14
ilt/swivel screen	Std.	Std.	Std.	Std.	Std.
otal displayable symbols	96	96	96	128 ASCII	128 ASCII
ymbol formation	7x8 dot matrix	7x7/7x8/7x10	7x8/7x10 dot matrix	7x11 in 9x12 cell	7x9 in 10x12 cell
haracter phosphor	Color	Green (9230); amber (9232)	Color	Green std.; amber opt.	Green std.; amber opt.
olor capability	7 colors std.	No	7 colors std.	No	No
raphics	No	No	No	15 graphics symbols	15 graphics symbo
rogrammable field/char. highlighting via:		1.10	1	. J grapinos symbols	. o grapinos symbt
Underline	Std./opt.	Std.	Std.	Std.	Std.
Blink	Std./opt.	Std.	Std.	Std.	Std.
Blank	No	No	No	Std.	Std.
Bold	No	No	No	Std.	Std.
Reverse	No	No	No	Std.	Std.
Double size	No	No	No	No	Std.
croll	No	No	No	Std.	Smooth std.
aging	No Std	No	No Std	No Std	2 std., up to 4 op
electable cursor blinking ddressable/readable cursor	Std.	Std. Both std.	Std. Both std.	Std. Std.	Std. Std.
daressable/readable cursor rotected format	Both std.	Std.	Std.	Std.	Std.
artial screen transmit	Std.	Std.	Std.	Std.	Std.
plit screen/windows	No.	No.	No.	No.	Std.
abulation	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.
haracter insert/delete	Std.	Std.	Std.	Std.	Std.
ine insert/delete	No	No.	No.	Std.	Std.
rase	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen
	std.	std.	std.	std.	opt.
YBOARD PARAMETERS	l		1	l	
tyle	Typewriter	Typewriter, data	Typewriter, data	Typewriter	Typewriter
	00 500010 (4.00)	entry, APL	entry, APL	400 4000	400 4000
haracter/code set	96 EBCDIC/ASCII	EBCDIC	EBCDIC	128 ASCII	128 ASCII
etachability rogram function keys	Std. 24 opt.	Std. 24 std.	Std. 24 std.	Std. 4 std. (12 func-	Std. 4 std. (12 func-
rogram function keys	24 Opt.	24 Stu.	24 Stu.	tions)	tions)
umeric keypad	Opt.	Opt.	Opt.	Std.	Std.
ICILLARY DEVICES	-		1000		
erial printer, type, and speed	150-240 cps	Up to 400 cps	Up to 400 cps	No	No
ine printer, type, and speed	600 lpm	300/600 lpm	300/600 lpm	No	No
composite video	No	No	No	No	No
ort for custsupplied devices	No	No	No	Std.	Std.
ther vendor-supplied devices	_		_	_	_
ANSMISSION PARAMETERS lode	Half-duplex	Half-duplex	Half-duplex	Half/full-duplex	Half/full-duplex
echnique	Synchronous	Synchronous	Synchronous	Asynchronous	Asynchronous
ommunications protocol	BSC, SNA/SDLC	BSC, SNA/SDLC	BSC, SNA/SDLC	ASCII	ASCII
ode	EBCDIC	EBCDIC	EBCDIC	ASCII	ASCII
peed, bits/second	Up to 19,200	Up to 19,200	Up to 19,200	50-19,200	50-19,200
ormat	Block	Block	Block	Char./block	Char./block
lultipoint operation	Std.	Std.	Std.	No	No
erminal interface	Coaxial	Coaxial	Coaxial	RS-232-C std.;	RS-232-C std.;
record on the	l		1	RS-422, 20mA opt.	20mA opt.
tegral modem	No	No	No	No	No
tegral acoustic coupler CING AND AVAILABILITY	No	No	No	No	No
isplay station, purchase	1,900	2,180	3,600	395	895
ontroller, purchase	5,700 & up	5,700 & up	5,700 & up		
lonthly prime-shift maintenance	1 00 th th	10	14		
innual prime-shift maintenance				_	<u> </u>
ate of announcement	4/84	4/84	4/84	3/85	12/82
ate of first production delivery	Fall 1984	Fall 1984	Fall 1984	4/85	1/84
isplay units installed to date	 		<u> -</u>	Over 12,000	<u> </u>
erviced by	ITT Courier	ITT Courier	ITT Courier	Qume, ITT Servcom	Qume, ITT Servco
A AN ACNITO			n		
MMENTS	Part of 9000	Part of 9000	Part of 9000		Foreign character
	Series; connects	Series; attaches to	Series; attaches to		sets, screen saver
	to ITT Courier 94XX controllers	ITT Courier 94XX controllers	ITT Courier 94XX controllers		automatic shutoff
	D-TAX CONTIONERS	Controllera	JOHN OHELS		1
]	1			
		1			
		1	1		
		<u> </u>			<u></u>

VENDOR AND MODEL	ITT Qume QVT 108	ITT Qume QVT 119	ITT Qume QVT 201	ITT Qume QVT 202	Kimtron ABM 83
RMINAL DESCRIPTION					
standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller		-	I 	-	
ransportability BM compatibility	No No	No	No No	No	No
eletype compatibility	Std.	No Std.	Std.	No Std.	Opt. Std.
Other compatibility	TeleVideo 912/920,	Qume QVT 109, ADDS		DEC VT102, VT220,	TVI 925/920/910
· · · ·	925	A2, Wyse WY-50	VT100	VT100, VT52	
SPLAY PARAMETERS					
isplay capacity, no. of char.	1920	1920, 3168	1920, 3168	1920, 3168	2000
Memory capacity, no. char./lines/pages creen arrangement, lines x char./line	2 pages 24x80 plus status	4 pages std. 24x80/132	1 page std. 24x80/132	1 page std. 24x80/132	2 pages opt. 25x80
creen arrangement, lines x char./line	line	24x60/132	24x00/132	24x60/132	25x60
creen area (diagonal), inches	12 std.; 14 opt.	14	14	14	12
ilt/swivel screen	Std.	Std.	Std.	Std.	Tilt std.
otal displayable symbols	128 ASCII	96 ASCII/80 graphic	128 ASCII	128 ASCII	128 ASCII
ymbol formation	7x9 in 9x12 cell	7x11 in 10x12/9x12	7x9 in 10x10/9x10	7x9 in 10x10/9x10	7x9 dot matrix
haracter phosphor	Green std.; amber	Green std.; amber	Green std.; amber	Green std.; amber	P31 std., amber op
color capability	opt. No	opt. No	opt. No	opt. No	No
iraphics	15 graphics symbols	80 graphics char.	15 graphics char.	15 graphics char.	
rogrammable field/char. highlighting via:	1	s	s	s	
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold Reverse	Std. Std.	Std. Std.	Std. Std.	Std. Std.	Std.
Double size	No.	Std.	Std.	Std.	No
croll	Std.	Smooth std.	Smooth std.	Smooth std.	Std.
aging	2 std.	4 pages std.	No	No	2 opt.
electable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Std.	Both std.	Both std.	Both std.	Std.
rotected format	Std.	Std.	No No	No	Std.
artial screen transmit plit screen/windows	Std. Std.	Std. Std.	Std.	No Std.	Std. Std.
abulation	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.
haracter insert/delete	Std.	Std.	Std.	Std.	Std.
ine insert/delete	Std.	Std.	Std.	Std.	Std.
rase	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen
VDO ADD DADAMETERS	std.	std.	std.	std.	std.
YBOARD PARAMETERS	T	Tunassitas	Turnavuritar	Tunnaturitar	Tumousians
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	128 ASCII	128 ASCII	128 ASCII	128 ASCII	96 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
rogram function keys	11 std. (22 func-	44 std.	34 std.	32 std.	Std.
	tions)	1	1	l	1
lumeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES Serial printer, type, and speed	No	45-90 cps	45-90 cps	45-90 cps	180 cps
ine printer, type, and speed	No	No	No	No	300 lpm
Composite video	No	No	No	Std.	No
ort for custsupplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices		Laser printer, 10	Laser printer, 10	Laser printer, 10	No
		ppm	ppm	ppm	1
					1
ANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
echnique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
communications protocol	ASCII	ASCII	ASCII	ASCII	ASCII
Code	ASCII	ASCII	ASCII	ASCII	ASCII
peed, bits/second ormat	50-19,200 Char (block	50-38,400 Char /line/block	50-19,200 Character	50-19,200 Character	50-19,200 Char /line /block
ormat Multipoint operation	Char./block No	Char./line/block No	No	Character No	Char./line/block No
erminal interface	RS-232-C std.;	RS-232-C std.;	RS-232-C std.;	RS-232-C std.;	RS-232-C or 20m/
	20mA opt.	RS-422, 20mA opt.	RS-422, 20mA opt.	RS-422, 20mA opt.	
ntegral modem	No	Opt.	No	No	Opt.
ntegral acoustic coupler	No	No	No	No	No
ICING AND AVAILABILITY	505	FOE	805	705	COF
hisplay station, purchase	595	595	695	795	695
Controller, purchase Monthly prime-shift maintenance					
Annual prime-shift maintenance	_			1_	1—
Date of announcement	12/82	8/85	3/85	3/85	7/83
Date of first production delivery	10/83	9/85	3/85	3/85	8/83
Display units installed to date		<u> </u>	<u> -</u>	<u> </u>	<u> </u>
Serviced by	Qume, ITT Servcom	ITT Servcom	ITT Servcom	ITT Servcom	RCA Service Co.
OMMENTS	Foreign character	Foreign character			1
DIAIIAIELA 1 9	Foreign character sets, screen saver	Foreign character sets, screen saver,			
	automatic shutoff	dual host capabil-			1
		ities			
		1	1	1	

VENDOR AND MODEL	Kimtron ABM 85H	Kimtron ABM 85H/ D100/200	Kimtron ABM 85H/VT-132	Kimtron ABM 86	Kimtron KGT-100
ERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller Transportability	No	No	No	No	No
IBM compatibility	Opt.	Opt.	Opt.	Opt.	No
Teletype compatibility	Std.	Std.	Std.	Std.	Std.
Other compatibility		Data General D100/ 200	DEC VT100/132	TeleVideo 912, 920, 925 std.; LSI, ADDS	DEC VT100, Tek- tronix 4010/4012
ISPLAY PARAMETERS	İ	i		1	'
Display capacity, no. of char.	2000	2000	2000	2160	2000, 3300
Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line	4 pages opt. 25x80	4 pages opt. 25x80	4 pages opt. 25x80	4 pages opt. 27x80	4 pages 27x80, 25x132
			1		
Screen area (diagonal), inches Tilt/swivel screen	12 Tilt std.	12 Tilt std.	12 Tilt std.	12 Tilt std.	12 No
Total displayable symbols	128 ASCII/11 graph.	258	258	128 ASCII/15 graph.	256 plus graphics
Symbol formation	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix
Character phosphor	P31 green std., P4 white & amber opt.	P31 std., amber opt.	P31 std., amber opt.	P31 green std., P4 white or amber opt.	Green, gray, or amber
Color capability	No	No	No	No	No
Graphics	11 graphics symbols			15 graphics symbols	Std.
Programmable field/char. highlighting via: Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold Reverse	Std.	Std. Std.	Std.	Std.	Std.
Double size	No	No	No	No	Std.
Scroll Paging	Std.	Std.	Std.	Up/down/smooth std.	Std.
Paging Selectable cursor blinking	4 opt. Std.	4 opt. Std.	4 opt. Std.	2 opt. Std.	4 std. Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Std.	Std.
Protected format	Std.	Std. Std.	Std. Std.	Std.	Std. Std.
Partial screen transmit Split screen/windows	Std.	Std.	Std.	Std.	Std.
Tabulation	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete Erase	Std. Char./line/screen	Std. Char./line/screen	Std. Char./line/screen	Std.	Std. Std.
	std.				1
EYBOARD PARAMETERS	Typouritor	Typouritor	Typowritor	Typowriter	Typewriter
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	96 ASCII	96 ASCII	96 ASCII	96 ASCII	96 ASCII
Detachability	Std.	Std.	Std. Std.	Std. 16 std.	Std. 16 std.
Program function keys	16 std.	Std.	Siu.	io siu.	io sia.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES	10.0% 5	180 cps	180 cps	No	No
Serial printer, type, and speed Line printer, type, and speed	19.2K bps	300 lpm	300 lpm	No	No
Composite video	No	No	No	No	No
Port for custsupplied devices Other vendor-supplied devices	Std.	Std. No	Std. No	Std.	Std.
Other vendor-supplied devices		140	140		_
RANSMISSION PARAMETERS Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Communications protocol	ASCII	ASCII	ASCII	ASCII	ASCII
Code Speed, bits/second	ASCII 50-19,200	ASCII 50-19,200	ASCII 50-19,200	ASCII 50-19,200	ASCII 50-19,200
Format	Char./block/line	Char./line/block	Char./line/block	Char./block/line	Char./block/line
Multipoint operation	No	No	No RS-232-C or 20mA	No RS-232-C; 20mA	No
Terminal interface	RS-232-C or 20mA	RS-232-C or 20mA	no-232-C or 20mA	RS-232-C; 20mA opt.	RS-232-C; 20mA opt.
Integral modem	Opt.	Opt.	Opt.	Opt.	Opt.
Integral acoustic coupler RICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	795	895	895	995	1,800
Controller, purchase			-]—	-
Monthly prime-shift maintenance Annual prime-shift maintenance					
Date of announcement	5/81	8/83	9/83	5/82	11/82
Date of first production delivery	9/81	8/83	9/83	12/82	1/83
Display units installed to date Serviced by	Over 13,900 RCA Service Co.	RCA Service Co.	RCA Service Co.	Over 1200 RCA Service Co.	Over 500 RCA Service Co.
•	TICA SELVICE CO.	TION SELVICE CO.	TION SERVICE CO.	THOM GOT VICE CO.	THE SELVICE CO.
OMMENTS					
		1			1
				1	

VENDOR AND MODEL	Kimtron KT-7	Lanpar Vision II 1100	Lanpar Vision II 3210	Lanpar Vision II 3221	Lanpar Vision II 3222
ERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Either	Standalone	Standalone	Standalone
Maximum displays/controller	<u></u>	1		<u></u>	No
Transportability IBM compatibility	No Opt.	No No	No No	No No	No
Teletype compatibility	Std.	No	Std.	Std.	Std.
Other compatibility	TeleVideo 920/925;	Burroughs ET 1100/	DEC VT100	DEC VT220	DEC VT220
ISPLAY PARAMETERS	ANSI, IBM, DG opt.	TD 830			
Display capacity, no. of char.	1920	2000	2000, 3300	2000, 3300	2000, 3300
Memory capacity, no. char./lines/pages	-	181 lines std.	80-132/224/8	80-132/224/8	80-132/224/8
Screen arrangement, lines x char./line	24x80 plus status	25x40/80	25x80/132	25x80/132	25x80/132
Screen area (diagonal), inches	line 12	14	14	14	14
Tilt/swivel screen	Std.	Std.	Std.	Std.	Std.
Total displayable symbols	128 ASCII	128 ASCII/multinat.	128	288	288
Symbol formation Character phosphor	7x9 dot matrix	7x12 dot matrix	7x12 dot matrix Green, amber, or	7x10 dot matrix Green, amber, or	7x12 dot matrix Green, amber, or
Character phosphor	Green; amber	Green std.; amber opt.	page white	page white	page white
Color capability	No	No	No	No	No
Graphics	Std.	No	No	Tek. 4010/4014 opt.	Tek. 4010/4014 op
Programmable field/char. highlighting via: Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold	No	Std.	Std.	Std.	Std.
Reverse Double size	Std. No	Std. (double wide)	Std.	Std. Std.	Std. Std.
Scroll	Std.	No	Up/down, smooth	Up/down, smooth	Up/down, smooth
Paging	No	Up to 25 logical pp.	4 std./8 opt.	4 std./8 opt.	4 std./8 opt.
Selectable cursor blinking	Std.	Std. (3 modes)	Std. (3 modes)	Std. (3 modes)	Std. (3 modes)
Addressable/readable cursor Protected format	Std.	Both std. Std.	Both std. Std.	Both std. Std.	Both std. Std.
Partial screen transmit	Std.	Std.	Std.	No	No
Split screen/windows	No	2 std.	6-line msg. window	6-line msg. window	6-line msg. window
Tabulation	Std.	Fwd /back std.	Fwd./back std.	Forward std.	Forward std.
Character insert/delete Line insert/delete	Std.	Std.	Std. Std.	Std.	Std.
Erase	Std. Line/form/page std.	Std. Char./line/field/	Char./line/screen	Std. Char./line/screen	Char./line/screen
		screen std.	std.	std.	std.
EYBOARD PARAMETERS	Tumpunitar	Tumanusiaas	Tumassuritar	Turnasseritar	Tum assurites :
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	ASCII	128 ASCII	ASCII	ASCII	ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	22 std.	14 std. (28 func-	16 std. (96 func-	15 std. (111 func-	15 std. (111 func-
Numeric keypad	Std.	tions) Std.	tions) Std.	tions) Std.	tions) Std.
NCILLARY DEVICES	Stu.	Stu.	Sid.	Sid.	Siu.
Serial printer, type, and speed	Std.	Up to 19.2K	Various	Various	Various
Line printer, type, and speed	Std.	No	Various	Various	Various
Composite video Port for custsupplied devices	No Std.	Std. No	Std.	Std.	Std.
Other vendor-supplied devices	— — — — — — — — — — — — — — — — — — —		— ·		—
•					
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half-duplex	Full-duplex	Full-duplex	Full-duplex
Technique	Asynchronous	Sync./async.	Asynchronous	Asynchronous	Asynchronous
Communications protocol Code	ASCII	Burroughs ASCII	TTY ASCII	TTY	ASCII
Speed, bits/second	ASCII 50-19,200	To 19,200 (async.)	Up to 19,200	ASCII Up to 19,200	Up to 19,200
Format	Char./block	Block	Char./block	Character	Character
Multipoint operation	No	Std.	No	No	No
Terminal interface	RS-232-C	RS-232-C	RS-232-C std.;	RS-232-C std.;	RS-232-C std.; 20mA opt.
Integral modem	No	No	20mA opt. No	20mA opt.	No Opt.
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY		1			
Display station, purchase Controller, purchase	595	1,395	995	950	1,095
Controller, purchase Monthly prime-shift maintenance				_	
Annual prime-shift maintenance					_
Date of announcement	12/83	-	-	_	-
Date of first production delivery Display units installed to date	12/83				三
Serviced by	RCA Service Co.	Lanpar Technologies	Lanpar Technologies	Lanpar Technologies	Lanpar Technologies
•					
OMMENTS	Line & block graph-				
	ics; optional PROM				
	provides DEC, IBM, Data General, ANSI				
	X3.64 compatibility				
	' "				
	1	1	1	Í	I
	1				

VENDOR AND MODEL	Lear Siegler ADM 3A	Lear Siegler ADM 3E	Lear Siegler ADM 11	Lear Siegler ADM 11plus	Lear Siegler ADM 12plus
RMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
flaximum displays/controller	-	-	l 		
ransportability	No	No	No	No	No
BM compatibility	No	No	No	No	No
eletype compatibility	Std.	Std.	Std.	Std.	Std.
Other compatibility	ADM 3	ADM 3A/5, ADDS Viewpoint A2/3A+	See comments	See comments	See comments
SPLAY PARAMETERS		Viewpoint AZ/3A+	1		
Pisplay capacity, no. of char.	1920	1920	1920	1920	1920
flemory capacity, no. char./lines/pages	1 page	1 page			2 pages
creen arrangement, lines x char./line	24x80	24x80 plus status	24x80 plus status	24x80 plus status	24x80/132 plus
		line	line	line	status line
creen area (diagonal), inches	12	14	12 std.; 14 opt.	12 std.; 14 opt.	12 std.; 14 opt.
ilt/swivel screen	No	Std.	Std.	Std.	Std.
otal displayable symbols	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128 ASCII
ymbol formation	5x7 dot matrix	7x9 dot matrix	7x10 dot matrix	7x10 dot matrix	7x10 dot matrix
haracter phosphor	P4 white or P31	P31 green or amber	P31 green; amber	P31 green or amber	P31 green std.;
alas assabilis.	green	1	opt.		amber opt.
olor capability	No	No	No	No	No
raphics rogrammable field/char, highlighting via:	Business graphics	Business graphics	Business graphics	Business graphics	Business graphics
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold	No.	No	Reduced std.	No	Reduced std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	No.	No.	No	No.	No.
croll	Std.	Std.	Std.	Std.	Std.
aging	No	No	No	No	2 std.; 4 opt.
electable cursor blinking	No	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Both std.
rotected format	No	No	No	No	Std.
artial screen transmit	No	No	No	No	Std.
plit screen/windows	No	No	No	No	Horizontal split
abulation	No	No	No	No	Std.
haracter insert/delete	No	Std.	No	Std.	Std.
ine insert/delete	No	Std.	No	Std.	Std.
rase	No	Line/page/screen	Line/page/screen	Line/page/screen	Line/page/screen
YBOARD PARAMETERS		std.	std.	std.	std.
tyle	T-1-4	T. m. a mia a u	T	T	T
otyle	Teletype	Typewriter	Typewriter	Typewriter	Typewriter
haracter/code set	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128 ASCII
Detachability	No ASCII	Std.	Std.	Std.	Std.
rogram function keys	No	8 std.	8 std.	16 std.	32 std.
	1	0.0.	10 0.0.		oz ota.
lumeric keypad	No	Std.	Std.	Std.	Std.
NCILLARY DEVICES	i	i	1		
erial printer, type, and speed	No	No	No	No	No
ine printer, type, and speed	No	No	No	No	No
Composite video	No	No	No	No	No
ort for custsupplied devices	Std.	Opt.	Std.	Std.	Std.
other vendor-supplied devices	_	_	-		_
ANSMISSION PARAMETERS	 Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
echnique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
communications protocol					
ode	ASCII	ASCII	ASCII	ASCII	ASCII
peed, bits/second	75-19,200	110-19,200	300-19,200	300-19,200	110-19,200
ormat	Character	Character	Character	Character	Char./block
fultipoint operation	No	No	No	No	No
erminal interface	RS-232-C or 20mA	RS-232-C std.;	RS-232-C or 20mA	RS-232-C std.;	RS-232-C std.;
According to the second	1	20mA, RS-422 opt.	I.	20mA, RS-422 opt.	20mA, RS-422 op
ntegral modem	No	No	No	No	No
ntegral acoustic coupler	No	No	No	No	No
ICING AND AVAILABILITY splay station, purchase	595	399	549	569	599
ontroller, purchase		1-0		_	_
Nonthly prime-shift maintenance	17	17	17	17	17
nnual prime-shift maintenance					-
ate of announcement	5/75	7/85	5/83	5/85	12/83
ate of first production delivery	8/75	7/85	6/83	6/85	3/84
isplay units installed to date			<u> </u>	<u> </u>	
erviced by	Lear Siegler	Lear Siegler	Lear Siegler	Lear Siegler	Lear Siegler
NA AR ACRITO	1	1	Franks 1 1 1	F 1	Facility 1
MMENTS	1	International char-	Emulations include:	Emulations include:	Emulations include
		acter sets std.;	LSI ADM 3A/5, ADDS	LSI ADM 3A/5 & 11,	LSI ADM 2, ADM
	I	unidirectional or bidirectional aux-	Viewpoint & Regent 25, Hazeltine 1400,	ADDS Viewpoint &	ADM 31, & ADM
			L/D mazeltine 14(I()	Regent 25, Hazeltine	TeleVideo 912, 92
					102E 9. 0EA. :
		iliary port with	1420, & 1500, DEC	1400, 1420, & 1500,	925, & 950; inter-
					925, & 950; inter- national character sets opt.

ERMINAL DESCRIPTION Standalone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility Other compatibility ISPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Screen area (diagonal), inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor	Standalone No No No Std. DEC VT220/VT100/ VT52, ANSI X3.64 1920 1 page std. 24x80/132 plus status 12 or 14 std. Std. 94 ASCII 7x9 dot matrix P31 green or amber No No Std. Std. No Std. Std. Std. Vertical/horizontal 1 std.	Standalone No 3278 Std. 1920 No 24x80 plus status line 12 std.; 14 opt. Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std. Std. Std. Std.	Cluster 32 No 3278/3178/3180 Std. DEC VT100/VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No Opt. Opt.	Cluster 32 No 3278/3178/3180 Std. DEC VT100/VT132/ VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 15 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No	Cluster 32 No 3279/3179 No — 1920 1 page 24x80 plus status line 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Color 7 colors std. No
Maximum displays/controller Fransportability BM compatibility Feletype compatibility Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. of char./lines/pages Green arrangement, lines x char./line Green area (diagonal), inches Filt/swivel screen Fotal displayable symbols Symbol formation Character phosphor Color capability Graphics Frogrammable field/char. highlighting via: Underline Blink Blank Blank Blank Blank Bold Reverse Double size Grotll Fraging Gelectable cursor blinking Gelectable cursor blinking Gelectable cursor blinking Gelectable cursor blinking Gelectable cursor blinking Gelectable cursor blinking	No No Std. DEC VT220/VT100/ VT52, ANSI X3.64 1920 1 page std. 24x80/132 plus status 12 or 14 std. Std. 94 ASCII 7x9 dot matrix P31 green or amber No No Std. Std. Std. Std. Std. Std. Std. Std.	No 3278 Std. 1920 No 24x80 plus status line 12 std.; 14 opt. Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std. Std. Std. Std.	32 No 3278/3178/3180 Std. DEC VT100/VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No	32 No 3278/3178/3180 Std. DEC VT100/VT132/ VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 15 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green	32 No 3279/3179 No — 1920 1 page 24x80 plus status line 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Color 7 colors std.
Transportability BM compatibility Celetype compatibility Other compatibility Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Jemory capacity, no. char./lines/pages Gereen area (diagonal), inches Titl/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Trogrammable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Groil Taging Gelectable cursor blinking Addressable/readable cursor	No Std. Std. Std. Std. Std. Std. Std. Std.	3278 Std. 1920 No 24x80 plus status line 12 std.; 14 opt. Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std. Std.	No 3278/3178/3180 Std. DEC VT100/VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No	No 3278/3178/3180 Std. DEC VT100/VT132/ VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 15 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green	No 3279/3179 No
SM compatibility eletype compatibility brher compatibility SPLAY PARAMETERS bisplay capacity, no. of char. Memory capacity, no. char./lines/pages icreen arrangement, lines x char./line creen area (diagonal), inches ilt/swivel screen otal displayable symbols symbol formation character phosphor color capability araphics trogrammable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size icroll aging elelctable cursor blinking elddressable/readable cursor	No Std. Std. Std. Std. Std. Std. Std. Std.	3278 Std. 1920 No 24x80 plus status line 12 std.; 14 opt. Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std. Std.	3278/3178/3180 Std. DEC VT100/VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No Opt.	3278/3178/3180 Std. DEC VT100/VT132/ VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 15 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No	3279/3179 No — 1920 1 page 24x80 plus status line 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Color 7 colors std.
reletype compatibility Other compatibility Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Remory capacity, no. char./lines/pages Green arrangement, lines x char./line Green area (diagonal), inches Green area (diagonal), inches Green area (diagonal) Green area (diag	Std. DEC VT220/VT100/ VT52, ANSI X3.64 1920 1 page std. 24x80/132 plus status 12 or 14 std. Std. 94 ASCII 7x9 dot matrix P31 green or amber No No Std. Std. Std. Std. Std. Std. Std. Std.	Std. 1920 No 24x80 plus status line 12 std.; 14 opt. Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std. Std. Std.	Std. DEC VT100/VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No Opt.	Std. DEC VT100/VT132/ VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 15 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No	No
Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Display capacity, no. of char. Display capacity, no. of char. Display capacity, no. of char. Display capacity, no. of char. Display capacity, no. of char. Display capacity, no. of char. Display capacity, no. of char. Display capacity, no. of char. Display capacity Display capa	DEC VT220/VT100/ VT52, ANSI X3.64 1920 1 page std. 24x80/132 plus status 12 or 14 std. Std. 94 ASCII 7x9 dot matrix P31 green or amber No No Std. Std. Std. No Std. Std. Std. Std. Std. Std. Vertical/horizontal	1920 No 24x80 plus status line 12 std.; 14 opt. Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std. Std. Std.	DEC VT100/VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No	DEC VT100/VT132/ VT52, HP 2624B 1920-3564 1 page 24/32/43x80, 27x132 15 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No	1920 1 page 24x80 plus status line 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Color 7 colors std.
Display capacity, no. of char. // flemory capacity, no. char. // flemory capacity, no. char. // flemory capacity, no. char. // flemory capacity, no. char. // flemory capacity, no. char. // flemory capacity capa	1920 1 page std. 24x80/132 plus status 12 or 14 std. Std. 94 ASCII 7x9 dot matrix P31 green or amber No No Std. Std. No Std. Std. Std. Std. Std. Std. Std. Vertical/horizontal	No 24x80 plus status line 12 std.; 14 opt. Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std.	1920-3564 1 page 24/32/43x80, 27x132 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No	1920-3564 1 page 24/32/43x80, 27x132 15 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No	1 page 24x80 plus status line 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Color 7 colors std.
Memory capacity, no. char./lines/pages creen arrangement, lines x char./line creen area (diagonal), inches cit/swivel screen fotal displayable symbols symbol formation character phosphor color capability graphics trogrammable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size circll aging dielectable cursor blinking kddressable/readable cursor	1 page std. 24x80/132 plus status 12 or 14 std. Std. 94 ASCII 7x9 dot matrix P31 green or amber No No Std. Std. Std. Std. Std. Std. Std. Std.	No 24x80 plus status line 12 std.; 14 opt. Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std.	1 page 24/32/43x80, 27x132 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No	1 page 24/32/43x80, 27x132 15 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No	1 page 24x80 plus status line 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Color 7 colors std.
creen arrangement, lines x char./line creen area (diagonal), inches cit/swivel screen otal displayable symbols ymbol formation character phosphor color capability craphics rogrammable field/char. highlighting via: Underline Blink Blank Blank Bold Reverse Double size croll aging electable cursor blinking kddressable/readable cursor	24x80/132 plus status 12 or 14 std. Std. 94 ASCII 7x9 dot matrix P31 green or amber No No Std. Std. No Std. Std. Std. Std. Vertical/horizontal	24x80 plus status line 12 std.; 14 opt. Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std. Std. Std. Std.	24/32/43x80, 27x132 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No	24/32/43x80, 27x132 15 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No	24x80 plus status line 14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Color 7 colors std.
ilt/swivel screen otal displayable symbols ymbol formation haracter phosphor olor capability iraphics rogrammable field/char. highlighting via: Underline Blink Blank Blold Reverse Double size croil aging electable cursor blinking kiddressable/readable cursor	12 or 14 std. Std. 94 ASCII 7x9 dot matrix P31 green or amber No No Std. Std. No Std. Std. Std. Std. Std. Vertical/horizontal	12 std.; 14 opt. Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std.	14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No	15 Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No	14 Std. 96 EBCDIC/ASCII 7x9 dot matrix Color 7 colors std.
ilt/swivel screen otal displayable symbols rymbol formation character phosphor color capability iraphics rogrammable field/char. highlighting via: Underline Blink Blank Blodd Reverse Double size ciroll aging electable cursor blinking kiddressable/readable cursor	Std. 94 ASCII 7x9 dot matrix P31 green or amber No No Std. Std. No Std. Std. Std. Vertical/horizontal	Std. 128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std. Std.	Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No No	Std. 96 EBCDIC/ASCII 7x9 dot matrix Green No	Std. 96 EBCDIC/ASCII 7x9 dot matrix Color 7 colors std.
otal displayable symbols cymbol formation character phosphor color capability iraphics rogrammable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size coroll aging electable cursor blinking kiddressable/readable cursor	94 ASCII 7x9 dot matrix P31 green or amber No No Std. Std. No Std. Std. Std. Std. Std. Vertical/horizontal	128 7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std. Std.	96 EBCDIC/ASCII 7x9 dot matrix Green No No Opt.	96 EBCDIC/ASCII 7x9 dot matrix Green No	96 EBCDIC/ASCII 7x9 dot matrix Color 7 colors std.
lymbol formation haracter phosphor color capability iraphics rogrammable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size croll aging electable cursor blinking kddressable/readable cursor	7x9 dot matrix P31 green or amber No No Std. Std. No Std. Std. Std. Vertical/horizontal	7x10 dot matrix P31 green std.; amber opt. No No Std. Std. Std. Std. Std.	7x9 dot matrix Green No No Opt.	7x9 dot matrix Green No No	7x9 dot matrix Color 7 colors std.
haracter phosphor color capability iraphics rogrammable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size croll aging electable cursor blinking kddressable/readable cursor	P31 green or amber No No Std. Std. No Std. Std. Std. Std. Vertical/horizontal	P31 green std.; amber opt. No No Std. Std. Std. Std.	Green No No Opt.	Green No No	Color 7 colors std.
iraphics rogrammable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size croll aging electable cursor blinking kdressable/readable cursor	No Std. Std. No Std. Std. Std. Std. Vertical/horizontal	No No Std. Std. Std. Std.	No Opt.	No	
rogrammable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size croll aging electable cursor blinking ddressable/readable cursor	Std. Std. No Std. Std. Std. Std. Vertical/horizontal	Std. Std. Std. Std. Std.	Opt.		No
Underline Blink Blank Bold Reverse Double size croll aging electable cursor blinking kddressable/readable cursor	Std. No Std. Std. Std. Vertical/horizontal	Std. Std. Std.		Ont	1
Blink Blank Bold Reverse Double size croll daging electable cursor blinking kddressable/readable cursor	Std. No Std. Std. Std. Vertical/horizontal	Std. Std. Std.			Opt.
Blank Bold Reverse Double size croll aging selectable cursor blinking kddressable/readable cursor	No Std. Std. Std. Vertical/horizontal	Std. Std.		Opt.	Opt.
Bold Reverse Double size croll aging electable cursor blinking kddressable/readable cursor	Std. Std. Std. Vertical/horizontal	Std.	Opt.	Opt.	Opt.
Double size icroll aging ielectable cursor blinking kddressable/readable cursor	Std. Vertical/horizontal	1844	Std.	Std.	Std.
croll aging lelectable cursor blinking kddressable/readable cursor	Vertical/horizontal		Opt.	Opt.	Opt.
aging electable cursor blinking addressable/readable cursor		No	No	No	No
electable cursor blinking Addressable/readable cursor		Std. No	No No	No No	No No
Addressable/readable cursor	Std.	Std.	Std.	Std.	Std.
	Both std.	Both std.	Addressable only	Addressable only	Addressable only
rotected format	No	No	Std.	Std.	Std.
artial screen transmit	No	No	Std.	Std.	Std.
plit screen/windows	Std.	No	No	Windowing	Application control
abulation	Fwd./back std.	No	Fwd./back std. Std.	Fwd./back std.	Fwd./back std.
Character insert/delete ine insert/delete	Std.	Std.	No	Std. No	Std. No
rase	Char./line/page/	Line/page/screen	Std.	Std.	Std.
	area std.	std.	1		1
YBOARD PARAMETERS	İ				L
Style	Typewriter	IBM 3278-style	Typewriter	Typewriter, data	Typewriter, data
Character/code set	ASCII	ASCII	96 EBCDIC/ASCII	entry, APL 96 EBCDIC/ASCII	entry, APL 96 EBCDIC/ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	30 std.	24 std.	24 std.	24 std.	24 std.
lumanta lanunad	Cont	644	Std.	Chal /ama	Crd
lumeric keypad NCILLARY DEVICES	Std.	Std.	Sta.	Std./opt.	Std.
Serial printer, type, and speed	No	No	80-340 cps	80-340 cps	80-340 cps
ine printer, type, and speed	No	No	300 lpm	300 lpm	300 lpm
omposite video	No	No	No	No	No
Port for custsupplied devices Other vendor-supplied devices	Std.	Std.	Opt.	Opt. Bar code reader.	Opt. Bar code reader,
other veridor-supplied devices				mag. stripe reader,	mag. stripe reader
				light pen	light pen
ANSMISSION PARAMETERS			L	l	
Mode Fachnique	Full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Fechnique Communications protocol	Asynchronous ANSI X3.64	Asynchronous	Sync./async. BSC,SNA/SDLC,ASCII	Sync./async. BSC,SNA/SDLC,ASCII	Synchronous BSC, SNA/SDLC
Code	ASCII	ASCII	EBCDIC/ASCII	EBCDIC/ASCII	EBCDIC
Speed, bits/second	75-19,200	300-19,200	19,200(sy),9600(as)	19,200(sy)/9600(as)	2400-19,200
ormat	Character	Character	Char./line/block	Char./line/block	Block
Aultipoint operation	No	No	Std.	Std.	Std.
erminal interface	RS-232-C std.;	RS-232-C std.;	RS-232-C	RS-232-C	RS-232-C
ntegral modem	20mA, RS-422 opt. No	20mA, RS-422 opt. No	No	No	No
ntegral modern	No	No	No	No	No
ICING AND AVAILABILITY		1	1	1	1
Display station, purchase	895	695	1,146-1,846	1,650-2,550	1,650
Controller, purchase	-	1=	3,720-21,964	3,720-21,964	3,720-21,964
Monthly prime-shift maintenance Annual prime-shift maintenance	17	17	8-10	9-11	9
Annual prime-snift maintenance Date of announcement	1984	12/83	7/84	8/79	1985
Date of first production delivery	1984	3/84	7/84	9/79	1985
Display units installed to date	<u> </u>	-		I	_
Serviced by	Lear Siegler	Lear Siegler	Lee Data	Lee Data	Lee Data
DMMENTS	International char-	Emulates IBM 3278	For use with Series	For use with Series	For use with Serie
· · · · · · · · · · · · · · · · · · ·	acter sets std.;	Model 2 when used	300 (3270) & Series	300 (3270) & Series	300 (3270) & Seri
	keyboard option	with protocol con-	400 (3270/Async)	400 (3270/Async)	400 (3270/Async
	ADM 364	verter	controllers	controllers	controllers
	'	-			
	1	1			
	1 .		1.		

VENDOR AND MODEL	Liberty Freedom 110	Liberty Freedom 200/210	Liberty Freedom 220/240	Link Technologies Link 125	Link Technologi Link 220
ERMINAL DESCRIPTION	Standalana	Standalana	Standalana	Standalana	Standolono
Standalone or cluster Maximum displays/controller	Standalone	Standalone —	Standalone	Standalone	Standalone
Transportability	No	No	No	No	No .
IBM compatibility	No	No	No	No	No
Teletype compatibility Other compatibility	Std. TeleVideo 910, ADDS	Std. TeleVideo 950, LSI	Std. DEC VT220/VT100/	Std. See comments (ADDS,	Std. DEC VT220, VT100
Other compatibility	R25, LSI ADM 3A/5	ADM 31; Tektronix	VT52; Tektronix	LSI, TVI, Wyse)	VT52, ANSI X3.64
DISPLAY PARAMETERS	· ·	·			, i
Display capacity, no. of char.	1920	1920	1920 132 or 80/24/1	1920, 3168	1920, 3168
Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line	24x80 plus status	2 pages std. 24x80 plus status	24x80 std.; 24x132	2 pages 26x80/132	2 pages 26x80/132
ocreen anangement, lines x char./ilile	line; 24x132 opt.	line; 24x132 opt.	opt.	20,00,102	20,00,102
Screen area (diagonal), inches	12; 14 opt.	12; 14 opt.	12; 14 opt.	14	14
Tilt/swivel screen	Std.	Std.	Std.	Std. 128 ASCII + graphic	Std.
Total displayable symbols Symbol formation	128 ASCII 7x9 dot matrix	128 ASCII & graphics 7x9 dot matrix	128 ASCII + graph. 7x9 in 10x12 field	8x13 in 9x14 field	8 128 ASCII sets 8x13 in 10x14 field
Character phosphor	P31 green std.;	P31 green std.;	P31 green std.,	P31 green or P24	P31 green or P24
	amber opt.	amber opt.	amber opt.	amber	amber
Color capability	No	No Ctd (210)	No Cod (240)	No Line and	No
Graphics Programmable field/char. highlighting via:	Line drawing set	Std. (210)	Std. (240)	Line std.	Line std.
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	No Std	Std.	Std.
Bold Reverse	Std. Std.	Std. Std.	Std. Std.	No Std.	Std. Std.
Double size	No.	Std.	Std.	No.	No
Scroll	Up std.	Std.	Std.	Std.	Std.
Paging	No	2 std.	No	1 std., 2 opt.	2 std., 6 opt.
Selectable cursor blinking Addressable/readable cursor	Std. Both std.	Std. Both std.	Std. Both std.	Std. Std.	Std. Std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows	No	Std.	Std.	Std.	Std.
Tabulation Character insert/delete	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.	Std. Std.	Std. Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Line/page std.	Std.	Std.	Std.	Std.
TIVE A DE DA DA DA DA DA DA DA DA DA DA DA DA DA					
EYBOARD PARAMETERS Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Style	Typewriter	Typewriter	Typewiller	Typewiitei	rypewriter
Character/code set	128 ASCII	ASCII	128 ASCII	ASCII	ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	10 std. (shiftable	47 std.	10 std. (20 func- tions)	40 std.	40 std.
Numeric keypad	to 20) Std.	Std.	Std.	Std.	Std.
ANCILLARY DEVICES	J.u.	0.0.			10.0.
Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed	No	No	No No	No No	No No
Composite video Port for custsupplied devices	No Std.	No Std.	Std.	Std.	Std.
Other vendor-supplied devices				-	
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII
Communications protocol Code	ASCII	ASCII	ASCII	ASCII	ASCII
Speed, bits/second	110-19,200	110-19,200	50-19,200	50-38,400	50-38,400
Format	Char./block	Char./block	Character	Char./line/block	Char./line/block
Multipoint operation	No RS-232-C	No PS 222 C	No RS-232-C	No BS-222 C or 20 mA	No
Terminal interface	NO-202-C	RS-232-C	NO-232-C	RS-232-C or 20 mA	RS-232-C, RS-423 or 20mA
Integral modem	No	No	No	No	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY	E4E	E0E /1 20E	745 (1 205	640	600
Display station, purchase	545	595/1,295	745/1,395	649	699
Controller purchase		_			_
Controller, purchase Monthly prime-shift maintenance	1		- .		-
Monthly prime-shift maintenance Annual prime-shift maintenance		1 4 4 100	6/84	2/85	11/85
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement	3/84	11/83	0.004		1/86
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery	3/84 4/84	11/83	8/84	3/85	1,700
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement			8/84 Liberty Electron-	Dow Jones	Dow Jones
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	4/84 Liberty Electronics, Sorbus	11/83 Liberty Electronics, Sorbus	Liberty Electron- ics, Sorbus	Dow Jones	<u> </u>
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date	4/84 — Liberty Electronics, Sorbus Also provides Haz-	11/83 Liberty Electronics, Sorbus Freedom 210 pro-	Liberty Electron- ics, Sorbus Freedom 240 pro-	Dow Jones Emulations include:	<u> </u>
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	4/84 Liberty Electronics, Sorbus Also provides Hazeltine 1420 emula-	11/83 Liberty Electronics, Sorbus Freedom 210 provides Tektronix	Liberty Electron- ics, Sorbus Freedom 240 pro- vides Tektronix	Dow Jones Emulations include: ADDS Viewpoint 60 &	<u> </u>
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	4/84 Liberty Electronics, Sorbus Also provides Hazeltine 1420 emulation; 15 graphics	11/83 Liberty Electronics, Sorbus Freedom 210 pro- vides Tektronix 4010/4014-compat-	Liberty Electronics, Sorbus Freedom 240 provides Tektronix 4010/4014-compat-	Dow Jones Emulations include: ADDS Viewpoint 60 & Viewpoint A1, Lear	<u> </u>
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	4/84 Liberty Electronics, Sorbus Also provides Hazeltine 1420 emula-	11/83 Liberty Electronics, Sorbus Freedom 210 provides Tektronix	Liberty Electron- ics, Sorbus Freedom 240 pro- vides Tektronix	Dow Jones Emulations include: ADDS Viewpoint 60 & Viewpoint A1, Lear Siegler ADM 3A/5, TeleVideo 910, 925,	<u> </u>
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	4/84 Liberty Electronics, Sorbus Also provides Hazeltine 1420 emulation; 15 graphics characters; 8 for-	11/83 Liberty Electronics, Sorbus Freedom 210 pro- vides Tektronix 4010/4014-compat-	Liberty Electronics, Sorbus Freedom 240 provides Tektronix 4010/4014-compat-	Dow Jones Emulations include: ADDS Viewpoint 60 & Viewpoint A1, Lear Siegler ADM 3A/5,	<u> </u>
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	4/84 Liberty Electronics, Sorbus Also provides Hazeltine 1420 emulation; 15 graphics characters; 8 for-	11/83 Liberty Electronics, Sorbus Freedom 210 pro- vides Tektronix 4010/4014-compat-	Liberty Electronics, Sorbus Freedom 240 provides Tektronix 4010/4014-compat-	Dow Jones Emulations include: ADDS Viewpoint 60 & Viewpoint A1, Lear Siegler ADM 3A/5, TeleVideo 910, 925,	<u> </u>
Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	4/84 Liberty Electronics, Sorbus Also provides Hazeltine 1420 emulation; 15 graphics characters; 8 for-	11/83 Liberty Electronics, Sorbus Freedom 210 pro- vides Tektronix 4010/4014-compat-	Liberty Electronics, Sorbus Freedom 240 provides Tektronix 4010/4014-compat-	Dow Jones Emulations include: ADDS Viewpoint 60 & Viewpoint A1, Lear Siegler ADM 3A/5, TeleVideo 910, 925,	<u> </u>

		y			
VENDOR AND MODEL	Link Technologies PCTerm	Matra Scanset 410/415/415HS	McDonnell Douglas Prism 7	McDonnell Douglas Prism 8	Megadata System 850
FERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller Transportability	No	Bomoble come cocc	No.	No	No
IBM compatibility	No	Portable carry case No	No	No	Opt.
Teletype compatibility	Std.	Std.	Std.	Std.	Opt.
Other compatibility	Kimtron KT-7, Wyse	DEC VT100/VT52		ANSI mode—subset	Opt.
DISPLAY PARAMETERS	WY-50			of DEC VT220	
Display capacity, no. of char.	1920, 3168	960, 1920	1920	1920, 3168	2000
Memory capacity, no. char./lines/pages	2 pages	2 pages opt.	80/25/1	80 or 132/25/8	16 pages
Screen arrangement, lines x char./line	26x80/132	24x40/80 plus	25x80	25x80/132	25x80
Screen area (diagonal), inches	14	status line 9	14	14	15
Tilt/swivel screen	Std.	No	Std.	Std.	Std.
Total displayable symbols	256 ASCII	96 ASCII	96 ASCII	96 ASCII	256
Symbol formation	8x13 in 9x14 field	5x9 in 6x10 cell	7x9 in 9x12 cell	7x9 in 10x12 cell	11x15 dot matrix
Character phosphor	P31 green or P24	P4 white	P31 green std.	P31 green std.;	P31 green std.;
Color capability	amber No	No	No	P134 amber opt.	PC144 amber opt.
Graphics	Line std.	No	No	No	No
Programmable field/char. highlighting via:					
Underline	Std.	Std.	Std.	Std.	Std.
Blink Blank	Std. Std.	No No	Std. Std.	Std. Std.	Std. Std.
Bold	No	No	Std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	No	No	No	Std.	No
Scroll Basing	Std.	Up/down std.	Up/down, jmp./smth.	Up/down, jmp./smth.	Up/down std.
Paging Selectable cursor blinking	2 std. Std.	2 opt.	No Std.	8 std. Std.	Std. Std.
Addressable/readable cursor	Std.	Std.	Both std.	Both std.	Both std.
Protected format	Std.	No	Std.	Std.	Std.
Partial screen transmit	Std.	No	No	Std.	Std.
Split screen/windows	Std.	No	Horizontal std.	Horizontal std.	2 std.
Tabulation Character insert/delete	Std. Std.	Std. Std.	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.
Line insert/delete	Std.	Std.	No	No	Std.
Erase	Std.	Std.	Char./line/screen	Char./line/screen	Char./line/screen
(E)(DO A DD D A D A A 45 T E DO			std.	std.	std.
(EYBOARD PARAMETERS Style	Typewriter	Typewriter	Typewriter, WP,	Typewriter, WP,	Typewriter
Style	Typewriter	Typewriter	data entry	data entry	Typewriter
Character/code set	ASCII	96 ASCII	96 ASCII	96 ASCII	128 ASCII
Detachability	Std.	No	Std.	Std.	Std.
Program function keys	40 std.	12 std.	18 std.	18 std.	96 std.
Numeric keypad	Std.	No	Std.	Std.	Std.
ANCILLARY DEVICES					
Serial printer, type, and speed Line printer, type, and speed	No No	120 cps dot matrix	Various matrix	Various matrix	30-350 cps impact
Composite video	No	No No	150/300/600 lpm No	150/300/600 lpm No	Opt.
Port for custsupplied devices	Std.	RS-232-C std.	Std.	Std.	3 std.
Other vendor-supplied devices		_			Tape punch, audible
					alarm, dual diskette
					drive
TRANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique Communications protocol	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Async./Sync.
Code	ASCII ASCII	ASCII ASCII	RG551A-video cont.	Various ASCII	To spec. ASCII/EBCDIC
Speed, bits/second	50-38,400	75-2400	50-19,200	50-38,400	50-19,200
Format	Char./line/block	Line	Character	Character	Char./block
Multipoint operation	No	No	No	No Do 400	Std.
Terminal interface	RS-232-C or 20mA	RS-232-C & RJ-11C	RS-232-C	RS-232-C or RS-422	RS-232-C
integral modem	No	Std.	No	No	Opt.
Integral acoustic coupler	No	No	No	No	No
PRICING AND AVAILABILITY	040	E4E. 00E. 00E	0	0	4 700 0 000
Display station, purchase Controller, purchase	649	545; 695; 995	Contact vendor	Contact vendor	1,700-2,800
Monthly prime-shift maintenance					20-50
Annual prime-shift maintenance					I=-
Date of announcement	11/85	2/82	1/86	1/86	-
Date of first production delivery	11/85	7/82	2/86	2/86	10/81
Display units installed to date Serviced by	Dow Jones	Matra, authorized	McDonnell Douglas	McDonnell Douglas	Megadata, third
	2011 001100	distributors	ocomion bougias		party
COMMENTS	Multi-user PC	Database access	Replaces the	Compatible with	8 bit microprocesso
	terminal	terminals; features	Prism IV; formerly	protocols offered	based terminal fea-
	1	include: one button	Microdata	by Tymnet; formerly	tures noiseless
		auto logon; phone directory; built-in		Microdata	operation and low power requirements
	ł	uirectory; built-in			2K EAROM for user
	1				I EN ENTION TOT USE
		1200 bps modem; VT100 terminal			selection of trans-
		VT100 terminal emulation; local			selection of trans- mission rate, parity
		VT100 terminal			

VENDOR AND MODEL	Memorex 2078	Memorex 2079	Memorex 2178	Memorex 2080	Memorex 2051
ERMINAL DESCRIPTION			-		
Standalone or cluster	Cluster	Cluster	Cluster	Cluster	Cluster
Maximum displays/controller	32	32	32	32	8
Transportability IBM compatibility	No 3278	No 3279	No 3178	No 3180	No 5251-11
Teletype compatibility	No	No	No	No	No
Other compatibility		_		Memorex 2078	-
			l	İ	ł
ISPLAY PARAMETERS Display capacity, no. of char.	1920-3564	1920, 2560	1920	1920-3564	1920
Memory capacity, no. char./lines/pages	1 page	1920, 2560 1920/2560 char.	1920 char.	1 page	1920 char.
Screen arrangement, lines x char./line	24/32/43x80,	24x80, 32x80	24x80	24/32/43x80,	24x80
•	27x132			27x132	
Screen area (diagonal), inches	15	13	12	15	15
Tilt/swivel screen Total displayable symbols	Tilt std. 94; APL up to 222	Tilt std. Up to 222	Std. 94	Std. 94	Std.
Symbol formation	9x12, 9x16 dot mat.	9x12 dot matrix	7x14 dot matrix	7x14 dot matrix	8x16 dot matrix
Character phosphor	P39 green, PLA	P22 color	P39 green	P39 green	P39 green or PLA
	amber				amber
Color capability	No	4/7 colors std.	No	No	No
Graphics	No	Opt.	No	No	No
Programmable field/char. highlighting via: Underline	Std.	Std.	No	Std.	Std.
Blink	Std.	Std.	No	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold	Std.	Std.	Std.	Std.	Std.
Reverse	Std.	Std.	No	Std.	Std.
Double size	No	No	No	No	No
Scroll Paging	No	No	No	No	No
Paging Selectable cursor blinking	No Std.	No Std.	No Std.	No Std.	No Std.
Addressable/readable cursor	Std.	Both std.	Both std.	Std.	Std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows	No	No	No	No	No
Tabulation	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.
Character insert/delete	Std.	Std.	Std. No	Std. No	Std. No
Line insert/delete Erase	No Char./field/screen	No Char./field/screen	Char./field/screen	Char./field/screen	Char./field/screen
	std.	std.	std.	std.	std.
EYBOARD PARAMETERS	1	1	1	1	
Style	Typewr.,data entry,	Typewr., data entry,	Typewriter, data	Typewr.,data entry,	Typewriter
O	APL, attr. select	APL, attr. select	entry	APL, attr. select	50000
Character/code set Detachability	EBCDIC/ASCII/APL	EBCDIC/ASCII/APL	96 ÉBCDIC Std.	EBCDIC/ASCII/APL Std.	EBCDIC Std.
Program function keys	Std. 10/12/24 std.	Std. 10/12/24 std.	24 std.	10/12/24 std.	10/12/24 std.
r regiani ranonon keye	10/12/24 314.	10, 12,24 314.	2-7 510.	10/12/24 514.	10/12/24 314.
Numeric keypad	Std.	Std.	Std. (Typewriter)	Std.	Std. (10 keys)
NCILLARY DEVICES	1.		l	1	
Serial printer, type, and speed	Impact,up to 350 cps	Up to 350 cps impact	120 cps impact	Impact, to 350 cps	Screen printer
Line printer, type, and speed Composite video	No No	No Opt.	No No	No No	No No
Port for custsupplied devices	Std.	Std.	No	Std.	No
Other vendor-supplied devices	Light pen, ext.	Lgt. pen, alarm,ext.	1—	Light pen, ext.	<u>-</u>
	highlighting, APL,	highlighting, graph.	ŧ	highlighting, APL,	
	graph., secur. key-	APL, keyboard num.		graph., secur. key-	
DANISMISSIONI DADAMETERS	lock, audible alarm	lock,secu. lock		lock, audible alarm	
RANSMISSION PARAMETERS Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Synchronous	Synchronous	Synchronous	Synchronous	Synchronous
Communications protocol	BSC/SDLC	BSC/SDLC	BSC, SNA/SDLC	BSC/SDLC	BSC, SNA/SDLC
Code	EBCDIC/ASCII/APL	ASCII/EBCDIC/APL	EBCDIC	EBCDIC/ASCII/APL	EBCDIC
Speed, bits/second	1200-56,000	1200-56,000	1200-56,000	1200-56,000	1200-9600
Format	Block	Block	Block	Block	Block
Multipoint operation Terminal interface	Std. RS-232-C; coax A	Std. RS-232-C; coax A	Std. Coax A	Std. Coax A	Std. Twinax
rennmar miteriace	no-232-0; coax A	no-232-C; coax A	COSX A	COBX A	Williax
Integral modem	No	No	No	No	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY			1	1.005	l
Display station, purchase	1,795-2,095	2,295-2,595	1,485	1,995	Contact vendor
Controller, purchase Monthly prime-shift maintenance	5,595-13,000	5,595-13,000 16-18	5,595-13,000	5,595-13,000	
Annual prime-shift maintenance	10-14	10-10	102		1=
Date of announcement	7/79	8/82	4/84	4/85	1982
Date of first production delivery	2/80	12/82	8/84	5/85	1982
Display units installed to date	l—			<u> </u>	
Serviced by	Memorex	Memorex	Memorex	Memorex	Memorex
ONANAENTS	D (007)	D 00714	D 00714	D 2077	
OMMENTS	Part of 207X	Part of 207X	Part of 207X	Part of 207X	
	Display System; attaches to 2174,	Display System; attaches to 2174,	Display System; attaches to 2174,	Display System; attaches to 2174,	
	2274, & 2076	2274, & 2076	2274, & 2076	2274, & 2076	1
	controllers, as well	controllers, as well	controllers, as	controllers, as well	1
	as to equivalent	as to equivalent	well as to equiv-	as to equivalent	1
	IBM controllers	IBM controllers	alent IBM control-	IBM controllers	1
	1	•	lers	1	
			I		
		1	İ		

	Memorex	Micro-Term	Micro-Term	Micro-Term	Micro-Term
VENDOR AND MODEL	2191	Mime 2A	Ergo 201/301	Ergo 320	Twist
ERMINAL DESCRIPTION			Constal and	Character and	Characteria and
Standalone or cluster Maximum displays/controller	Cluster 8	Standalone	Standalone	Standalone	Standalone
Transportability	No.	No	No	No	No
IBM compatibility	5291-2/5251-11	No	No	No	No
Teletype compatibility	No	Std.	Std.	Std.	Std.
Other compatibility	140	DEC VT52, Hazeltine	TeleVideo 925, LSI	DEC VT220	DEC VT100/VT52
other compatibility		1500, Soroc 120	ADM 3A, DEC VT100	DEC VIZZO	ANSI, LSI, TVI
ISPLAY PARAMETERS	ł	1000, 00100 120	ADM OA, DEG VIIO		Altoi, Loi, 1 VI
Display capacity, no. of char.	1920	1920	1920	2000, 3300	2000 or 5760
Memory capacity, no. char./lines/pages	1920 char.	1	1-2 pgs std.	1 page	3 pages
Screen arrangement, lines x char./line	24x80	24x80	24x80; 24x132 (301	25x80/132	25x80 or72x80
,,,,	12	1	only)		
Screen area (diagonal), inches	12	12	12	12	15
Tilt/swivel screen	Std.	No	Tilt std.	Tilt std.	Std.
Total displayable symbols	 	128	128 ASCII	128 ASCII + (4x128)	128 ASCII + 128
Symbol formation	8x16 dot matrix	7x11 dot matrix	7x11 dot matrix	7x11 dot matrix	20x17 dot matrix
Character phosphor	P39 green or PLA	P4 white	P31 green,amber opt.	P31 green or amber	P4 white or amber
	amber	į		_	
Color capability	No	No	No	No	No
Graphics	No	No	Opt.	Opt.	No
Programmable field/char. highlighting via:	la .	la.	1	ام. ا	la.,
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	No	Std.	Std.	Std.
Bold	Std.	No	No	Std.	Std.
Reverse Double size	Std.	Std.	Std.	Std.	Std.
Scroll	No No	No	No	Std.	Std.
Scroll Paging	No No	Std. No	Up/down, smooth std.	Up/down, smooth 1 std.	Up/down, smooth 3 std.
Selectable cursor blinking	Std.	Std.	No	Std.	Std.
Addressable/readable cursor	Std.	Std.	No	Std.	Std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows	No.	No	No.	Std.	Std.
Tabulation	Fwd./back std.	Std.	Fwd./back std.	Std.	Std
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	No	Std.	Std.	Std.	Std.
Erase	Char./field/screen	Char./line/screen	Std.	Std.	Std.
	std.	std.			1
EYBOARD PARAMETERS					
Style	Typewriter	Typewriter	Typewriter	Typewriter (DEC	Typewriter
	1	"	1	VT220)	"
Character/code set	EBCDIC	128 ASCII	128 ASCII	ASCII	ASCII
Detachability	Std.	No	Std.	Std.	Std.
Program function keys	10/12/24 std.	Std.	16 std.	16 std.	16 std.
	l	l	l	l	l
Numeric keypad	Std. (10 keys)	Std.	Std.	Std.	Std.
NCILLARY DEVICES	la	1	1	l.,	1
Serial printer, type, and speed Line printer, type, and speed	Screen printer	No	No	No No	No No
Composite video	No	No	No	Std.	No
Port for custsupplied devices	No No	No Std.	No Std.	Std.	Std.
Other vendor-supplied devices					
RANSMISSION PARAMETERS Mode	Holf (full discolor)	Holf (full display	Holf /full dumlar	Holf (full dumlar)	Holf/fi.ill discolors
Mode Technique	Half/full-duplex Synchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous
Communications protocol	BSC, SNA/SDLC	ASCII	ASCII		
Code	EBCDIC	ASCII	ASCII	ASCII	ASCII
Speed, bits/second	1200-9600	110-9600	Up to 19,200	Up to 19,200	Up to 19,200
Format	Block	Char./line/block	Char./line/block	Char./line	Char./line/block
Multipoint operation	Std.	No	No.	1	_
Terminal interface	Twinax	RS-232-C or 20mA	RS-232-C std.; 20mA	RS-232-C, RS-422,	RS-232-C or 20m/
		1	opt.	or 20mA	1
Integral modem	No	No	No	No	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY			· ·		
Display station, purchase	1,545	1,045	745-995	795	1,595
Controller, purchase		I		_	
Monthly prime-shift maintenance	-	18-22	_		
Annual prime-shift maintenance		 	1.000	1-104	-
Date of announcement	9/85		1983	11/84	7/84
Date of first production delivery	9/85	8/78	1983	11/84	4/84
Display units installed to date Serviced by	Momorov	Mostorn Hains	Mostorn Union	Western Heine	1000
Serviced by	Memorex	Western Union	Western Union	Western Union	Western Union
OMMENTS		1	Graphics option	Tektronix & ReGIS	Screen rotates 90
CHITICATIO		ı	available for	graphics option	degrees to display
		1	Ergo 201	graphics option available	data in landscape
		1	- '90 20'	a valiable	(25x80) or full-
		1			page (72x80) form
	i	1	1		-3go (, 2,00) 10111
				-	
	,				

VENDOR AND MODEL	NCR 7900 Model 1	NCR 7900 Model 3	NCR 7901	NCR 7910	NCR 7950	
ERMINAL DESCRIPTION Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Cluster	
Maximum displays/controller		Standalone			32	
Transportability	No	No	No	No	No	
IBM compatibility Teletype compatibility	No Std.	No Std.	No Std.	No Std.	3270 No	
Other compatibility	- Std.			No.		
ISPLAY PARAMETERS						
Display capacity, no. of char. Memory capacity, no. char./lines/pages	2000	2000	1920	2000 12K	1920, 2560, 3564	
Screen arrangement, lines x char./line	25x80	25x80	24x80	25x80/132	24/32x80, 27x132	
Screen area (diagonal), inches	12	12	12	15	15; 14 (color)	
Tilt/swivel screen Total displayable symbols	Std. 64/96/128	No 128 ASCII	Tilt std. 96 ASCII	Std. 128 ASCII, 32 graph.	Std. 96 ASCII	
Symbol formation	7x7 dot matrix	7x7 dot matrix	5x7 dot matrix	7x9,5x9 dot matrix	7x9 dot matrix	
Character phosphor	Amber std.	P31 green std.	P31 green std.	Amber std.	P31 green std.,	
Color capability	No	No	No	No	amber opt.; color 7 colors std.	
Graphics	No		No	Graphics char. set	No	
Programmable field/char. highlighting via:		la		,		
Underline Blink	Std.	Std. Std.	Std. Std.	Std. Std.	Opt.	
Blank	No	Std.	Std.	Std.	Opt.	
Bold	No	No	No	Std.	Opt.	
Reverse Double size	Std.	Std.	Std. No	Std. Std.	Opt.	
Scroll	Up std.	No No	No No	Up/down std.	No	
Paging	No	No	No	4 pgs std.	No	
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.	
Addressable/readable cursor Protected format	Addressable only No	Both std. Std.	Addressable only No	Both std. Std.	Addressable only Std.	
Partial screen transmit	No	Std.	No	Std.	Std.	
Split screen/windows	No	No	No	Std.	No	
Tabulation Character insert/delete	No No	Fwd./back std. Std.	No No	Fwd./back std. Std.	Std. Std.	
Line insert/delete	No	Std.	No	Std.	Std.	
Erase	Line/screen std.	Char./line/screen	Screen std.	Char./line/screen	Char./line/screen	
EYBOARD PARAMETERS		std.		std.	std.	
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter, data	
Character/code set	64/96/128 ASCII	128 ASCII	96 ASCII	128 ASCII	entry ASCII/EBCDIC	
Detachability	Opt.	Opt.	Std.	Std.	Std.	
Program function keys	1 key (96 functions)	No	No		24 std.	
Numeric keypad	Std.;touch-tone opt.	Std.,touch-tone opt.	Std.	Std.	Std.	
ANCILLARY DEVICES	Thermal (immed	No	Serial interface	No	200 cps matrix	
Serial printer, type, and speed Line printer, type, and speed	Thermal/impact	No	No No	No	No cps matrix	
Composite video	No	No	No	No	No	
Port for cust -supplied devices	Std.	Std.	Std.	Std.	No	
Other vendor-supplied devices					Audible alarm	
RANSMISSION PARAMETERS Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	
Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Synchronous	
Communications protocol	ASCII	ASCII	ASCII	TTÝ	SNA/SDLC ASCII/EBCDIC	
Code Speed, bits/second	ASCII 50-19,200	ASCII 50-9600	ASCII 110-19,200	ASCII	1200-9600	
Format	Char./line	Line/page	Character		Block std.	
Multipoint operation	No BS 333 C	Both std.	No BC 222 C	No DC 222 C: DC 422	Std.	
Terminal interface	RS-232-C	RS-232-C	RS-232-C	RS-232-C; RS-422 opt.	Coaxial	
Integral modem	No	No	No	No	No	
Integral acoustic coupler PRICING AND AVAILABILITY	No	No	No	No	No	
Display station, purchase	1,500	3,500-3,670	850	1,995	1,395	
Controller, purchase Monthly prime-shift maintenance	19	33	15	18	6,000 46-75	
Annual prime-shift maintenance	——————————————————————————————————————		I			
Date of announcement	ł —	_	2/82	9/83	7/83	
Date of first production delivery Display units installed to date	6/79		5/82	9/83	7/83	
Serviced by	NCR	NCR	NCR	NCR	NCR	
COMMENTS		Parallel interface		96 Int'l symbols,		
COMMENTS		std.		conforms to ANSI		
				X3.64 and NCR		
				7900-1/-4		
	1		1			

VENDOR AND MODEL	Nixdorf 8278	Paradyne 9440	Paradyne 9476	Paradyne 9478	Paradyne 7811
	82/8	9440	9476	94/8	/811
ERMINAL DESCRIPTION Standalone or cluster	Cluster	Either	Either	Either	Standalone
Maximum displays/controller	256	3	32	32	-
Transportability IBM compatibility	No 3278	No 1052	No 3276	No 3278	No Emulation program
Teletype compatibility	No	No	No	No	Std.
Other compatibility	_	_	_	_	TeleVideo 910, Lea
ISPLAY PARAMETERS					Siegler ADM 31
Display capacity, no. of char.	1920	1920	1920	1920	1920
Memory capacity, no. char./lines/pages					-
Screen arrangement, lines x char./line	24x80	24x80	24x80	24x80	24x80
Screen area (diagonal), inches	12	12	15	15	12
Tilt/swivel screen	Opt.	Tilt std.	Tilt std.	Tilt std.	Std.
Total displayable symbols Symbol formation	96 EBCDIC 7x9 dot matrix	128 ASCII/EBCDIC 7x14 dot matrix	128 ASCII/EBCDIC 8x16 dot matrix	128 ASCII/EBCDIC 8x16 dot matrix	128 ASCII 8x10 dot matrix
Character phosphor	Amber	P39 green	P39 green	P39 green	P39 green
Color capability Graphics	No No	No no	No	No	No Graphics char. set
Programmable field/char. highlighting via:					1
Underline	No	No	Std.	Std.	Std.
Blink Blank	No No	No Std.	Std. Std.	Std. Std.	No No
Bold	Std.	No	Std.	Std.	Reduced std.
Reverse	No	No	Std.	Std.	Std.
Double size Scroll	No No	No Std.	No No	No No	No No
Scroll Paging	No	No	No	No	No
Selectable cursor blinking	Std.	No	Std.	Std.	Std.
Addressable/readable cursor Protected format	Both std. Std.	Both std.	Both std. Std.	Both std. Std.	Both std. No
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows	No	No	No	No	No
Tabulation	No	No	Std.	Std.	No
Character insert/delete Line insert/delete	Std.	No No	Std. No	Std. No	No No
Erase	Line/screen std.	Std.	Std.	Std.	Std.
EYBOARD PARAMETERS					1
Style	Typewriter, data	Typewriter	Typewriter, data	Typewriter, data	Typewriter
·	entry, enhanced	1	entry, WP	entry, WP	1 "
Character/code set	96 ÉBCDIC	ASCII	ASCII/EBCDIC	ASCII/EBCDIC	ASCII
Detachability Program function keys	Std. 12-24 std.	Std. 24 std.	Std. 24 std.	Std. 24 std.	Std. 14 std.
,					
Numeric keypad NCILLARY DEVICES	Std.	Opt.	Std.	Std.	Std.
Serial printer, type, and speed	40/100/150/210 cps	Impact	45/150 letter/dot	45/150 letter/dot	Std.
Line printer, type, and speed	300 lpm steel band	No	300/600 band	300/600 band	Std.
Composite video	No	Opt.	Opt.	Opt.	No
Port for custsupplied devices Other vendor-supplied devices	No Audible alarm,	No Light pen, keylock	Opt. Light pen, keylock	Opt. Light pen, keylock	Std.
	security keylock				
RANSMISSION PARAMETERS					
Mode	Half-duplex	Half/full-duplex	Full-duplex	Full-duplex	Full-duplex
Technique Communications protocol	Synchronous HDLC	Asynchronous Paradyne SDLC	Synchronous Paradyne SDLC	Synchronous Paradyne SDLC	Asynchronous
Code	EBCDIC	ASCII/EBCDIC	ASCII/EBCDIC	ASCII/EBCDIC	ASCII
Speed, bits/second	Up to 9600	Up to 19,200	Up to 256KB	256KB	300-19,200
Format Multipoint operation	Block	Character	Block Std.	Block	Character No
Multipoint operation Terminal interface	Std. RS-232-C/SAS	No RS-232-C	RS-232-C	No RS-232-C	RS-232-C
	· ·		ı		
Integral modem Integral acoustic coupler	No No	No No	Opt. No	Opt. No	No No
RICING AND AVAILABILITY					
Display station, purchase	1,610 (8278)	3,000	5,850	3,000	695
Controller, purchase Monthly prime-shift maintenance	12,850 (8274) 11	1,000 27	2,500 30	4,000	
Annual prime-shift maintenance	132	— .	_		_
Date of announcement	11/82	11/80	11/80	11/80	3/84
Date of first production delivery Display units installed to date	6/83 3500	1/81 200	1/81 400	1/81 Over 1200	3rd Q/84
Serviced by	Nixdorf	Paradyne	Paradyne	Paradyne	Paradyne
·	1	1		1	1
OMMENTS	Components of 8270 Compatible Display		All remote connect- ed devices appear		Attaches to Paradyne's Systen
	System; concurrent		as local channel		8400 and network
	local & remote		attached; no need		multiplexers; func-
	device support; no		for remote software;		tions as 3278 via
	remote software for controller requir-		Paradyne CRTs use loop technology		emulation program 8400; graphics &
	ed; connects to				foreign language
	8274 controller	1	1	i	characters

	·	·	-		,	
VENDOR AND MODEL	Perfect Terminal P200	Perfect Terminal P210	Perfect Terminal P6312	PHAZE P3278	PHAZE P3279	
FERMINAL DESCRIPTION						
Standalone or cluster	Standalone	Standalone	Standalone	Cluster	Cluster	
Maximum displays/controller Transportability	No	No	No	32 No	32 No	
IBM compatibility	No	No	No	3278/3178	3279-2A/3179	
Teletype compatibility	No	No	No		No	
Other compatibility	Prime PT-200	Data General D210/ 211	Perkin-Elmer 6312	Std.	No	
DISPLAY PARAMETERS	1000 0100		1000 0100	1000	1000	
Display capacity, no. of char. Memory capacity, no. char./lines/pages	1920, 3168 4K char.	1920, 3168 4K char.	1920, 3168 4K char.	1920	1920	
Screen arrangement, lines x char./line	24x80/132	24x80/132	24x80/132	24x80 plus status	24x80 plus status	
Screen area (diagonal), inches	14	14	14	line	line 14	
Tilt/swivel screen	Std.	Std.	Std.	12 Std.	Std.	
Total displayable symbols	128	128	128	128 EBCDIC	128 EBCDIC	
Symbol formation	7x13 dot matrix	7x13 dot matrix	7x13 dot matrix	7x14 dot matrix	7x11 dot matrix	
Character phosphor	Green or amber	Green or amber	Green or amber	P42 green	Color	
Color capability	No	No	No	No	4 colors std.	
Graphics	No	No	No	_	No	
Programmable field/char. highlighting via: Underline	Std.	Std.	Std.	Std.	Std.	
Blink	Std.	Std.	Std.	Std.	Std.	
Blank	Std.	Std.	Std.	Std.	Std.	
Bold	Std.	Std.	Std.	Std.	Std.	
Reverse	Std.	Std.	Std.	Std.	Std.	
Double size	No	No	No	No	No	
Scroll Paging	Up/down std.	Up/down std.	Up/down std.	No	No	
Paging Selectable cursor blinking	2 opt. Std.	2 opt. Std.	2 opt. Std.	No Std.	No Std.	
Addressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Both std.	
Protected format	Std.	Std.	Std.	Std.	Std.	
Partial screen transmit	Std.	Std.	Std.	Std.	Std.	
Split screen/windows	No	No	No	No	No	
Tabulation	Fwd./back std.	Fwd./back std.	Fwd./back std.	Std.	Std.	
Character insert/delete	Std.	Std.	Std.	Std.	Std.	
Line insert/delete Erase	Std. Line/screen std.	Std. Line/screen std.	Std. Line/screen std.	No Char./line/screen	No Char./line/screen	
	,	,	, , , , , , , , , , , , , , , , , , , ,	std.	std.	
(EYBOARD PARAMETERS Style	Typewriter	Typewriter	Typewriter	Typewriter, data	Typewriter, data	
•				entry	entry	
Character/code set	128 ASCII	128 ASCII	128 ASCII	EBCDIC	96 EBCDIC	
Detachability Program function keys	Std. 32 std.	Std. 38 std.	Std. 32 std.	Std. 24 std.	Std. 24 std.	
Program function keys	32 Std.	36 Std.	32 Std.	24 Std.	24 Std.	
Numeric keypad ANCILLARY DEVICES	Std.	Std.	Std.	Std.	Std.	
Serial printer, type, and speed	No	No	No	No	No	
Line printer, type, and speed	No	No	No	No.	No	
Composite video	Ni	Ni	Ni	No	No	
Port for custsupplied devices	Std.	Std.	Std.	Std.	Parallel	
Other vendor-supplied devices		 	 	Light pen, magnetic	Light pen, magnetic	
				card reader	card reader, bar code	
TD 4 NO. 41001011 D 4 D 4 N 4 T T T D 0						
TRANSMISSION PARAMETERS Mode	Full-duplex	Full-duplex	Full-duplex	 Half/full-duplex	Half/full-duplex	
Technique	Asynchronous	Asynchronous	Asynchronous	Synchronous	Synchronous	
Communications protocol	ASCII	ASCII	ASCII	BSC, SNA/SDLC	BSC, SNA/SDLC	
Code	ASCII	ASCII	ASCII	EBCDIC	EBCDIC	
Speed, bits/second	Up to 38,400	Up to 38,400	Up to 38,400	1200-9600; 2.54MHz	1200-9600; 2.54M	
Format Multipoint operation	Char./line/block	Char./line/block	Char./line/block	Block Std.	Block Std.	
Terminal interface	RS-232-C	RS-232-C	RS-232-C	Coax A (3270)	Coax A (3270)	
Integral modem	No	No	No	No	No	
Integral acoustic coupler	No	No	No	No	No	
PRICING AND AVAILABILITY						
Display station, purchase Controller, purchase	795	795	795	1,045	1,995	
Monthly prime-shift maintenance				I	 	
Annual prime-shift maintenance		-	_	110-134	135-184	
Date of announcement	7/85	6/85	6/85	12/82	1/85	
Date of first production delivery	8/85	7/85	6/85	1/83	2/85	
Display units installed to date Serviced by	200 Dow Jones/factory	500 Dow Jones/factory	700 Dow Jones/factory	Third party	Third party	
·	2 2235/130(0)					
COMMENTS			1	Lightweight (31	DIN ergonomics	
•			Į.	pounds); designed	standard; screen	
	1	1		for user mainte-	save features; IBM compatible	
			1	nance; DIN compat- ible; auto video	ipivi companble	
			1	shut-down; IBM		
				compatible		
					1	
			i			
			I			
	4	<u> </u>	· · · · · · · · · · · · · · · · · · ·	i		

i				Prime	
VENDOR AND MODEL	PHAZE P9020	Plessey PT-220	Plessey PT-100B	Performer Terminal	RCA VP-3301/VP-3303
ERMINAL DESCRIPTION					
Standalone or cluster Maximum displays/controller	Either 32	Standalone	Standalone	Standalone	Standalone
Transportability		No	No	No	Briefcase
IBM compatibility	3278/PC	No	No	No	
Teletype compatibility Other compatibility	No	Std.	Std. DEC VT100	Std. Prime	Std.
·	Std.	DEC VT220/VT100, ANSI X3.64	DEC VI 100	Frime	_
ISPLAY PARAMETERS Display capacity, no. of char.	1920	1920, 3168	1920, 3168	2000, 3696	960
Memory capacity, no. char./lines/pages	To 640K		<u> </u>	512K1024K	
Screen arrangement, lines x char./line	24x80 plus status line	24x80/132	24x80/132	25x80, 28x132	24x40, 12x20
Screen area (diagonal), inches	12	12	12	14	
Tilt/swivel screen	Std.	Std.	No OS ACCII	Tilt 256 ASCII	Opt.
Total displayable symbols Symbol formation	256 EBCDIC/ASCII 7x14 dot matrix	128 7x10 in 10x10 cell	96 ASCII 7x9 dot matrix	7x9/5x7 dot matrix	95 ASCII 6x8 dot matrix
Character phosphor	P42 green	P4 white std.; P31	Green, amber, or	White, amber, or	
		grn., P22 amb. opt.	white	green	
Color capability Graphics	Opt.	No Line drawing std.	No Graphics char, set	Opt.	8 colors NTSC
Programmable field/char. highlighting via:	_	Line drawing std.	Graphics char. set	Opt.	
Underline	Std.	Std.	Std.	Std.	No
Blink	Std.	Std.	Std.	Std.	Std.
Blank Bold	Std. Std.	No Std.	No Std.	Std. Dim std.	Std. No
Reverse	Std. Std.	Std.	Std.	Std.	Std.
Double size	No	Std.	Std.	No	Std.
Scroll	No	Smooth/jump	Smooth	Up/down std.	Up std.
Paging Selectable cursor blinking	No Std.	No Std.	No Std.	2 std. Std.	No Std.
Addressable/readable cursor	Both std.	Std.	Std.	Std.	Both
Protected format	Std.	No	No	Std.	No
Partial screen transmit	Std.	Std.	Std.	Std.	No
Split screen/windows Tabulation	No Std.	Std. Std.	Std. Std.	No Fwd./back std.	No Fwd. std.
Character insert/delete	Std.	No.	No.	Std.	Std.
Line insert/delete	No	No	No	Std.	No ·
Erase	Char./line/screen std.	Std.	Std.	Char./line/field/ screen std.	Line, screen std.
EYBOARD PARAMETERS	siu.			screen stu.	
Style	Typewriter, data	Typewriter	Typewriter	Typewriter	Membrane, typewriter
Character/code set	entry	A CO!!	ACCII	256 4564	120 4000
Detachability	EBCDIC Std.	ASCII Std.	ASCII Std.	256 ASCII Std.	128 ASCII Std.
Program function keys	24 std.	4 std.	4 std.	26 std.	No
Normania karusad	0.1	O. d	0.4	0.4	0.4
Numeric keypad NCILLARY DEVICES	Std.	Std.	Std.	Std.	Std.
Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed	No	No	No	No	No
Composite video	No	No	No	No	Std.
Port for custsupplied devices Other vendor-supplied devices	Std. Light pen, mag card	Std.	Std. No	No	Std. No
other vehicle supplied devices	reader, 2 360KB		140		
	drives, serial/				
RANSMISSION PARAMETERS	parallel ports				
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Async./sync.	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Communications protocol	ASCII/BSC/SNA/SDLC	ASCII/ANSI	ASCII	Xon/Xoff	A CCII
Code Speed, bits/second	EBCDIC/ASCII 1200-9600; 2.54 MHz	ASCII 75-19,200	ASCII 50-19,200	ASĆII 50-19,200	ASCII 110-19.200
Format	Block	Character	Character	Char./block	Character
Multipoint operation	Std.	No	No	No	No
Terminal interface	Coax A (3270)	RS-232-C or 20mA	RS-232-C std.; 20mA opt.	RS-232-C/CCITT V.24	RS-232-C
Integral modem	No	No.	No	No	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY	0.500	0	0	005	420/440
Display station, purchase Controller, purchase	2,500	Contact vendor	Contact vendor	995	439/449
Monthly prime-shift maintenance		_	_	10	
Annual prime-shift maintenance			-		-
Date of announcement Date of first production delivery	9/83	1984		1/85	4/81 4/81
Display units installed to date	11/83	1984		2/85	Over 5000
Serviced by	Third party	Plessey	Plessey	Prime	Factory
OMMENTS	Designed for	•			
CIVIIVIENTS	Designed for user maintenance; mod-				
	ular design; ergo-				
	nomic features; DIN		,		
	compatible; auto	2			
	video shutdown; compatible with IBM				
				i	i .
	PC; parallel				

VENDOR AND MODEL	RCA VP-3501	RCA VP-4801	RCA VP-5801	Soroc Challenger 530	Soroc Challenger 54
ERMINAL DESCRIPTION	VF-3501	VF-4801	VF-9801	Chanenger 530	Chanenger 54
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller	2	_	2	l —	
Fransportability BM compatibility	Briefcase	Briefcase	Briefcase	No	No
Feletype compatibility	Std.	Std.	No Std.	No Std.	No Std.
Other compatibility			ADDS Viewpoint,	Lear Siegler ADM 3	Basic IV, Alpha
			Texas Instruments		Micro
SPLAY PARAMETERS		4000	200 4000	4000	1000
Display capacity, no. of char. Memory capacity, no. char./lines/pages	960	1920 1 page	960, 1920 1 page	1920 1 page	1920 1 page
Screen arrangement, lines x char./line	24x40, 12x20	24x80	24x40/80, opt.	24x80 plus	24x80 plus
			status line	status line	status line
Screen area (diagonal), inches	l _ .	12	12	12	12
Tilt/swivel screen Total displayable symbols	Opt. 95 ASCII	No 95 ASCII	No	Std. 128	Std. 128
Symbol formation	6x8 dot matrix	7x8 dot matrix	7x8 dot matrix	5x9 dot matrix	5x9 dot matrix
Character phosphor	_	P31 green	P31 green	P31 green std.	P31 green std.
		l •			
Color capability Graphics	8 colors NTSC	No	No	No	No
orapnics Programmable field/char. highlighting via:		<u> </u>	2x3 block matrix	Std.	Std.
Underline	No	No	No	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold Reverse	No Std	No Std	No	No Std	No Std
Double size	Std.	Std. No	No.	Std.	Std.
Scroll	Up std.	Smooth		Up std.	Up std.
Paging	No	No	No	No	No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both	Both	Both std.	Both std.	Both std.
Protected format Partial screen transmit	No No	No	No No	Std. Std.	Std.
Split screen/windows	No		No	No	No
Tabulation	Fwd. std.	Fwd./back opt.	Fwd./back std.	Fwd./back std.	Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
ine insert/delete	No	No	Std.	Std.	Std.
Erase	Line, screen std.	Line, screen std.	Char./line/screen	Char./line/screen	Char./line/screen
EYBOARD PARAMETERS			std.	std.	std.
Style	Membrane, typewriter	Membrane, typewriter	Typewriter	Typewriter	Typewriter
,		,	1 "	1	''
Character/code set	128 ASCII	128 ASCII	64 ASCII	128 ASCII	128 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	No	8 std.	8 user programmable	14 std.	16 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES	10.0.	Join.	Jota.	10.0.	Jora.
Serial printer, type, and speed	No	No	No	No	No
ine printer, type, and speed	No	No	No	No	No
Composite video Port for custsupplied devices	Std.	Std.	No	No	No
Other vendor-supplied devices	No Acoustic coupler	Std. Acoustic coupler	No Acoustic coupler	Std.	Std.
Striet Veridor-supplied devices	Acoustic coupler	Acoustic coupler	Acoustic couplei		
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Communications protocol	l'	<u> </u>	<u></u>	ASCII	ASCII
Code	ASCII	ASCII	ASCII	ASCII	ASCII
Speed, bits/second Format	300 Character	110-9600 Character	Up to 9600	110-36,400 Char /line/block	110-36,400 Char /line/block
-ormat Vultipoint operation	Character No	Character Std.	Character No	Char./line/block	Char./line/block
Terminal interface	20 mA	RS-232-C, 20mA,	RS-232-C	RS-232-C or 20mA	RS-232-C or 20 m
		or parallel			
ntegral modem	Std.	Std.	Std.	Opt.	Opt.
ntegral acoustic coupler	Opt.	Opt.	No	No	No
RICING AND AVAILABILITY Display station, purchase	498	498	798	595	895
Controller, purchase					
Monthly prime-shift maintenance	_	_	_	_	_
Annual prime-shift maintenance		_	_	l 	
Date of announcement	11/81	6/83	11/84	1/83	6/83
Date of first production delivery	11/81	9/83	1/85	1/83	6/83
Display units installed to date Serviced by	Over 3000	Footony	Footone	Soroc	Soroc
Jerviced by	Factory	Factory	Factory	SOLOC	SOFOC
OMMENTS	1	1	Built-in 1200/300		
		1	bps direct connect		
			modem; auto dial,		
	I	i	auto logon capa-		
	1				
			bility		

VENDOR AND MODEL	Soroc Challenger 525	Sperry SVT 1210	Sperry SVT 1220	Sperry SVT 1120	Tandberg Data TDV 2200S Family
ERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller		<u></u>		NI-	
Fransportability BM compatibility	No No	No No	No No	No No	No 3101
Feletype compatibility	Std.	No	No	No	Std.
Other compatibility	TeleVideo 925	DEC VT52	DEC VT220, VT131	Sperry UTS 20	DEC VT100/VT200
					ANSI X3.64, more
SPLAY PARAMETERS Display capacity, no. of char.	1920	3168	3168	3168	2000
Memory capacity, no. char./lines/pages	1 page	1 page	1 page	1 page	24K std.; 40/56 op
Screen arrangement, lines x char./line	24x80 plus	24x80/132	24x80/132	24x80/132	25x80
	status line	100	1.0		4-
Screen area (diagonal), inches Filt/swivel screen	12 Std.	12 Std.	12 Std.	14 Std.	15 Std.
Total displayable symbols	128	96 ASCII/32 graphic	DEC multinat./NRC	ASCII/Sperry nat.	1024
Symbol formation	5x9 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9/5x7 dot matrix	9x14 dot matrix
Character phosphor	P31 green std.	P31 green	P31 green	P31 green	P31 green std.;
Date a secondary				A1-	white opt.
Color capability Graphics	No Std.	No DEC graphics char.	No DEC graphics char.	No No	No 720x336 pixel opt.
Programmable field/char. highlighting via:	o.u.	SEO grapinos char.			ZONOGO PINOI OPL.
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	No	Std.	Std.	Std.
Blank	Std.	No	Std.	Std.	Std.
Bold Reverse	No Std.	No Std.	Std. Std.	Low intensity Std.	Dim std. Std.
Double size	No	Std.	Std.	No	Std.
Scroll	Up std.	Smooth std.	Var. speed smooth	No	Smooth, step
Paging	No	No	No	2 virtual screens	1 std.; 4/8/10 opt
Selectable cursor blinking	Std.	Std.	Std.	No	Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Both std.
Protected format Partial screen transmit	Std. Std.	No No	No Std.	Std. Std.	Std. Std.
Split screen/windows	No	2 std.	2 std.	No.	Std.
Tabulation '	Fwd./back std.	Forward std.	Forward std.	Fwd./back std.	Std.
Character insert/delete	Std.	No	No	Std.	Std.
ine insert/delete	Std.	No Saraan atd	No Char /line/serses	Std.	Std. Char./line/page/
Erase	Char./line/screen std.	Screen std.	Char./line/screen	Char./line/screen	buffer std.
EYBOARD PARAMETERS					
Style	Typewriter	Typewriter (DEC	Typewriter (DEC	Typewriter (94-	Typewriter, data
		VT100-style)	VT220-style)	key)	entry, custom
Character/code set Detachability	128 ASCII	ASCII	DEC multinat./NRC	ASCII/Sperry nat. Std.	256 ASCII Std.
Program function keys	Std. 20 std.	Std. 26 std.	Std. 62 std. (15 user-	22 std.	16 std.
Togram function keys	20 314.	20 314.	programmable)	Std.	10 510.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES	A.1	400	400	100	150 min
Serial printer, type, and speed Line printer, type, and speed	No No	160 cps matrix	160 cps matrix	160 cps matrix No	Ink jet, 150 cps No
Composite video	No	No	No	No	Opt.
Port for custsupplied devices	Std.	Std.	Std.	Std.	Opt.
Other vendor-supplied devices			_	-	Mag. card reader,
					security locks,
					mouse
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Full-duplex	Half/full-duplex	Full-duplex	Half/full-duplex
Technique	Asynchronous	Asynchronous	Asynchronous	Synchronous	Async./sync./ISO
Communications protocol	ASCII	TTY	TTY	Uniscope	ASCII/HDLC/X.25
Code Speed, bits/second	ASCII 110-36,400	ASCII Up to 19,200	ASCII Up to 19,200	ASCII Up to 19,200	ASCII 50-19,200
Format	Char./line/block	Character	Char./block	Block	Char./line/block
Multipoint operation	No	No	No '	Std.	Std.
Terminal interface	RS-232-C or 20 mA	RS-232-C	RS-232-C	RS-232-C	RS-232-C, RS-422
lests and an endough				 	or 20mA
Integral modem Integral acoustic coupler	Opt.	No No	No No	No No	Opt. No
Integral acoustic coupler RICING AND AVAILABILITY	No	INO	INO	140	140
Display station, purchase	895	495	895	795/895	995-1,995
Controller, purchase		-		<u> </u>	-
Monthly prime-shift maintenance		Various	Various	Various	
Annual prime-shift maintenance		Various	Various	Various	7/04
Date of announcement Date of first production delivery	5/84 5/84	1/85 1/85	5/85 5/85	10/85 10/85	7/84
Display units installed to date		1.700		1.0,00	140,000
Serviced by	Soroc	Sperry	Sperry	Sperry	Siemens
•					
OMMENTS					Other emulations
					include: DG, HP,
	1	1			Datapoint, Sperry, & Honeywell; meet
					German GSA std.
					ergonomics; 70 Hz
					refresh rate; total
	1	1	1	1	flexibility for
				1	customizing

VENDOR AND MODEL	Tandberg Data TDV 2400	Tandem 6530 Family	Tandy DT-100	Tatung TVT-7220	TEC ET80/ET100
ERMINAL DESCRIPTION					
Standalone or cluster Maximum displays/controller	Standalone	Standalone	Standalone	Standalone	Standalone
Fransportability	No	No	No	Portable case	No
BM compatibility	No	No	No	No	No
Teletype compatibility	Std.	Std.	Std.	No	Std.
Other compatibility	DEC VT220, ANSI X3.64	Tandem	DEC VT100, ANSI X3.64	DEC VT220/VT200/ VT100/VT102/VT52	TEC 70; DEC VT10 (ET100 only)
SPLAY PARAMETERS Display capacity, no. of char.	900-4224	2000	1920, 3168	1920, 3168	2000
Memory capacity, no. of char./lines/pages	1M bytes	Up to 8 pages	1320, 3100	1 page	5 pages
Screen arrangement, lines x char./line	18/32x50/132	25 x 80	24x80/132	24x80/132	24x80 plus status
Screen area (diagonal), inches	15	9(30)/12(31)/15(32)	14	14	line 15
Tilt/swivel screen	Std.	Std.(30); Opt.	Std.	Std.	Std.
Total displayable symbols	1024; 256 download	128 ASCII	128 ASCII	128 ASCII	256
Symbol formation Character phosphor	10x22 dot matrix P31 green std.;	7x9 dot matrix P31 green	White	7x9 dot matrix P31 green std.;	7x12 dot matrix Black on white
Character phosphol	white opt.	r 3 i green	VVIIILE	H10 opt.	background
Color capability	Planned (1986)	No	No	No	No
Graphics	800x600 pixel opt.	No	No	No	No
Programmable field/char. highlighting via:	0.4	Cont	Cod	0.4	0.4
Underline Blink	Std.	Std. Std.	Std. No	Std. Std.	Std. Std.
Blank	Std.	Std.	No No	No	Std.
Bold	Std.	Std.	Dim std.	Std.	No.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	Std.	No	No	Std.	Std.
Scroll	Smooth, step Std.	Std. Std.	Std. No	Up/down, smooth 1 std.	Up/down/jump/sm Std.
Paging Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Std.	Std.	Std.	Both std.	Std.
Protected format	Std.	Std.	No	Std.	Std.
Partial screen transmit	Std.	Std.	No	-	Std.
Split screen/windows	Std.	No	No	Split screen std.	Std.
Tabulation Character insert/delete	Std. Std.	Std. Std.	Std. No	Fwd./back std. Std.	Std. Std.
Line insert/delete	Std.	Std.	No	Std.	Std.
Erase	Char./line/page/		Std.	Char./line/screen	Std.
	buffer std.			std.	
EYBOARD PARAMETERS Style	Typewriter, data	Typewriter	Typewriter (DEC	Typewriter, data	Typewriter
otyle -	entry, custom	Typewriter	VT220 style)	entry	Typewriter
Character/code set	256 ASCII	ASCII	ASCII	128 ASCII	256 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	20 std.	16 std.	16 std.	15 std.	18 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES		C+4	N-	N-	1
Serial printer, type, and speed Line printer, type, and speed	Ink jet, 150 cps No	Std. No	No No	No No	No No
Composite video	Opt.	No	No	No	No
Port for custsupplied devices	Opt.		Std.	Std.	Std.
Other vendor-supplied devices	Mag. card reader,	_			Card reader/writer
	security locks, mouse				
	mouse				
RANSMISSION PARAMETERS Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
viode Technique	Async./sync.	Async./sync.	Asynchronous	Asynchronous	Asynchronous
Communications protocol	ASCII/HDLC	ASCII	ASCII/ANSI	XON/XOFF, DTR	ASCII
Code	ASCII	ASCII	ASCII	ASCÍI	ASCII
Speed, bits/second	50-38,400; 1M opt.	50-19,200	Up to 19,200	75-19,200	Up to 19,200
Format Multipoint, operation	Char./line/block	Char./block	Character	Char./line	Char./block/line
Multipoint operation Terminal interface	RS-232-C, RS-422,	Std. RS-232-C or 20mA	No RS-232-C	No RS-232-C, 20mA, or	No RS-232-C std.;
Torrimal interface	or 20mA	THO ZOZ O OF ZOTIA	110 202 0	RS-422/423	20/60mA opt.
ntegral modem	No	No	No	No	No
ntegral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY Display station, purchase	1,995-2,995	1,950-2,300	795	695	1,975
Display station, purchase Controller, purchase	I—	1,330-2,300			
Monthly prime-shift maintenance	_	18	=	1—	
Annual prime-shift maintenance	1	 —		-	
Date of announcement	11/85	3/82	7/84	10/84	5/81
Date of first production delivery Display units installed to date		4/82	7/84	7/85	1/82
Serviced by	Siemens	Tandem	Radio Shack	Tatung Co. of	TEC
•	l		1	America	
OMMENTS	Supports windowing,	For use with Tandem	Available at		Model ET100 featu
	multitasking, multiiple hosts;	NonStop Systems; three models avail-	selected Radio Shack stores &		vertical scrolling to display 132-
	UNIX-compatible;	able: 6530, 6531, &	dealers; for use		character lines
	Motorola 6800,	6532	with Model 16 com-		January mics
	8 MHz DMA channel	1	puter running TRS-		
	opt.		XENIX		
	i				
		1			
		1			

VENDOR AND MODEL	TEC 630	TEC DP-84	Tektronix 4025A	Tektronix 4100 Series	Telegenix TDS 2070
RMINAL DESCRIPTION				<u>.</u>	
tandalone or cluster	Standalone	Standalone	Standalone	Either	Standalone
Maximum displays/controller ransportability	No	Portable	No	No	Opt.
BM compatibility	No	No.	No	No	No
eletype compatibility	Std.	No	Std.	Std.	Std.
Other compatibility	Upon request	See comments	DEC VT100 opt.	DEC VT100	ANSI X3.64
SPLAY PARAMETERS		1000	2720	0500	64 4000
hisplay capacity, no. of char. Memory capacity, no. char./lines/pages	2000 Up to 4 pages	1280 80/24/1	16K/400/12 total	2560 To 256K	64-1920 1 page
creen arrangement, lines x char./line	25x80	16x80 (scrollable)	34x80	30/32x80	Custom (.7-inch
				'	character)
creen area (diagonal), inches ilt/swivel screen	12 Opt.	2.75 in. x 9.3 in.	12 No	13, 19 model dep. Opt.	Various Opt.
otal displayable symbols	128	No (lap) 95 ASCII/32 graph.	96 std.	224 ASCII	68 ASCII
ymbol formation	6x8 dot matrix	5x7	7x9 dot matrix	6x9/8x14 dot matrix	Segmented 16-stroke
haracter phosphor	P4 white std.; P31	Liquid crystal dis-	P39 green	P22 color	Neon orange
1. 1 1. 99.	green opt.	play (LCD)		0	(plasma)
color capability Graphics	No No	No Std. (VT100 comp.)	No Std.	8 colors std. Std.	No No
rogrammable field/char. highlighting via:					
Underline	Std.	Std.	Std.	Std.	No
Blink	Std.	Std.	Std.	Std.	Std.
Blank Bold	Std. Reduced std.	Std. No	Std.	Std. Std.	Std.
Bola Reverse	Std.	Std.	Std.	Std.	No
Double size	No	Std.	No	Std.	No
croll	Std.	Up/down, right/left	Up/down std.	Std.	4-way std.
aging	2/4 opt.	No Std	Std. No	Std. Std.	1 std. Std.
electable cursor blinking addressable/readable cursor	Std. Both std.	Std.	Both std.	Sta. Both std.	Addressable only
rotected format	Std.	No	Std.	No	No
artial screen transmit	Std.	No	Std.	No	No
plit screen/windows	Std.	Std.	Std.	Std.	Unlimited
abulation	Fwd./back/auto Std.	Fwd./back std.	Fwd./back std. Std.	Fwd./back std. Std.	Forward std.
haracter insert/delete ine insert/delete	Std.	No	Std.	Std.	No
rase	Line/page/screen/	Char./line/screen	Char./line/screen	Std.	Char./line/screen
WOO ADD DADAMETEDO	memory std.	std.	std.		
YBOARD PARAMETERS	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter (opt.)
r.y.o	Typownton	Typowitto	. , , , , , , , , , , , , , , , , , , ,		1
Character/code set	128 ASCII	95 ASCII/32 graph.	ASCII	ASCII	68 ASCII
Petachability	Std.	No	Std.	Std.	Std. 15 std.
rogram function keys	6 std.	Std.	20 plus all keys std.	Std.	15 Std.
lumeric keypad	Opt.	Opt.	0.4.	Std.	Std.
NCILLARY DEVICES	1		0		A 1.
Serial printer, type, and speed ine printer, type, and speed	No No	No No	Serial opt.	No.	No No
Composite video	Opt.	No	Std.	No	No
ort for custsupplied devices	Std.	Std. (printer)	Std.	Std.	Opt.
Other vendor-supplied devices	Mag. card reader/		Tape, plotters		Ceiling, floor, &
	writer				wall mounts
A NICHAICCIONI DA DANAETEDO					
RANSMISSION PARAMETERS Mode	Half/full-duplex	Half/full-duplex	Full/std.; half/opt.	Full-duplex	Simplex
echnique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
ommunications protocol	<u> </u>	Async./ASCII	ASCII	ASCII	Start-stop
Code	ASCII	ASCII/ANSI X3.64	ASCII 75-9600	ASCII Up to 38,400	ASCII-77
Speed, bits/second Format	110-9600 Char./line/block	Up to 19,200 Character	Char./block	Character	Up to 9600 Character
Aultipoint operation	No	No	No	No	Std.
erminal interface	RS-232-C std.; 20mA	RS-232-C	RS-232-C or 20mA	RS-232-C, Centron-	RS-232-C std.; 20m/
ntogral modem	opt.	No	No	ics No	opt. No
ntegral modem ntegral acoustic coupler	No No	No Opt.	No .	No No	No No
RICING AND AVAILABILITY	1		l l	1	1
Display station, purchase	1,475-1,995	995	5900	3,995-9,950	2,400-29,500
Controller, purchase Monthly prime-shift maintenance			7		Included Various
Annual prime-shift maintenance				[_	- various
Date of announcement	3/81	7/84	1977	4/83	10/85
Date of first production delivery	5/81	11/84	1977	10/83	Spring 1986
Display units installed to date Serviced by	TEC	Factory	Tektronix	Tektronix	See comments Telegenix & third
•	1.20		1		party
OMMENTS	Available in rack-	Emulations include:	Updated to 4025A	132-character mode	Over 15,000 plasma
	mount or mag card reader/writer ver-	DEC VT100/VT52, TeleVideo 910, Lear	in 1981 w/new features, 3X speed,	through vertical scrolling	gas discharge dis- plays of various
	sions	Siegler ADM 3A &	4027A color terminal	Soroming	sizes installed
	1	ADM 5, Hazeltine	also available		throughout the U.S.
		(Esprit) 1400 &			Canada, Europe, &
		1410, ADDS Regent			Saudi Arabia; each
		20 & Regent 25			display is custom built (within cer-
	•		•		

Sampleting of the properties o	VENDOR AND MODEL	Telegenix TDS 2000	Telegenix TDS 2200	Teleray Model 7	Teleray Model 16-7801	Teleray Model 16/ 16 APL
Make Make	ERMINAL DESCRIPTION					
Transportability		Standalone	Standalone	Standalone	Standalone	Standalone
Bill Compatibility Side Section Sectio			<u></u>	No.	No.	No.
Std. Std. Std. Std. ARSI X3.64 Std. Std. Std. Std. ARSI X3.64 ARSI X3.64 ARSI X3.64 Secomments the homeywall VIP 7801 ARSI X3.64 AR						
Septical Part Septical Sept	Teletype compatibility	Std.	Std.	Std.	Std.	Std.
18-1920 1-926 1-	Other compatibility	ANSI X3.64	ANSI X3.64	See comments	Honeywell VIP 7801	ANSI X3.64
Custom (1-inch) Screen arrangement), lines x otar / line Screen arrangement (1-inch) S					1920	
Commerce of disposal, inches inchanced by Various Vari					24x80 plus	
Till / Section Comments Comme		character)			status line	
256 Incl. 128 ASCII 28 ASCII 4 Graphics 128 ASCII 128 ASCII 4 Graphics 128 ASCII						
Symbol formation						
Character phosphor Non orange (plasman) Character phosphor (plasman) Character phosph						8x10 dot matrix
No			Neon orange			
Simples Singhis Sing	0.1 4.00.			l	.	
No						
Uniderline Std. S		140	140	Ορι.	Grapinos char. Set	Grapinos Char. Set
Blink Blink Strd. Strd	Underline					
Bold Reverse Double size No No No No No No No No No No No No No						Std.
Double size Doubl						
Double size Size Size Size Size Size Size Size Size						
Scroll spain of the comments o	Double size		No	Std.	No	No
Salectable cursor blinking Addressable cursor blinking Add		4-way std.	4-way std.	Up/down/horiz./sm.	Std.	Up/down/horiz./sm
Addressable only No No No No No No No No No No No No No						
Protected format Printile screen transmit Soft screen/vindows Printile screen transmit Soft screen/vindows Industrial Soft screen/vindows Industrial Soft screen/vindows Industrial Soft Soft Std. Std. Std. Std. Std. Std. Std. Std	Addressable/readable cursor					
Split screen/windows Tabulation Forward std. Forward std. Forward std. Forward std. Forward std. Forward std. St						
Forward std. No No No Char / line/screen / memory std. Std. Std. Std. Std. Std. Std. Std. S						
Character insert/delete insert/delete Erase PROARD PARAMETERS Dityle Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter Type						
Line insert/delete Errises Char./line/screen std. Char./line/screen std. Char./line/screen std. Char./line/screen std. Char./line/screen std. Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter Typewri						
Char, /line/screen std. Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter (opt.) Typewriter T						
EYBOARD PARAMETERS Style Character/code set Character/code set Character/code set Detachability Typewriter Std.				Char./line/screen/		Char./line/screen/
Chrarecter/code set Detachability Std. Std. Std. Std. Std. Std. Std. Std.	EVECADE DADAMETERS		std.	memory std.	memory std.	memory std.
Detachability Program function keys Numeric keypad NCILLARY DEVICES Numeric keypad NCILLARY DEVICES Strill printer, type, and speed Line printer, type, and speed Line printer, type, and speed Composite vides Port for cust-supplied devices Coffiner cust-supplied devices Coffiner vendor-supplied devices RANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Multippiont operation Terminal interface Format Multippiont operation Terminal interface Integral modem Integral modem Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller		Typewriter (opt.)	Typewriter (opt.)	Typewriter	Typewriter	Typewriter
Detachability Program function keys Numeric keypad NCILLARY DEVICES Numeric keypad NCILLARY DEVICES Strill printer, type, and speed Line printer, type, and speed Line printer, type, and speed Composite vides Port for cust-supplied devices Coffiner cust-supplied devices Coffiner vendor-supplied devices RANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Multippiont operation Terminal interface Format Multippiont operation Terminal interface Integral modem Integral modem Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller	•	"		1 ~	1	'
Std. Std.						
Numeric keypad NCILLARY DEVICES Scrial printer, type, and speed Line printers Line Line Line Line Line Line Line Line						
NCILLARY DEVICES Scrial printer, type, and speed Line printer, type, and speed Composite video Port for cust-supplied devices Other vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-supplied vendor-s	rogram function keys	15 std.	15 stu.	32/04 d361-d61111.		02/04 d361 d61111.
Serial printer, type, and speed Line printer, type, and speed Composite video Composite video Opt. Opt. Opt. Opt. Opt. Opt. Opt. Opt.		Std.	Std.	Std.	Std.	Std. & calc. mode
Line printer, type, and speed Composite video No No No No No No Opt. Opt. Opt. Opt. Opt. Opt. Opt. Opt.				1	 . .	
Composite video Port for custsupplied devices Other vendor-supplied evices Other vendor-supplied evices Other vendor-supplied devices Other vendor-supplied vendor-s						
Other vendor-supplied devices Other vendor-supplied of vendor-supplied ven	Composite video					
RANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Communications Communications Communications Communications Communications Communications Communications Code Speed, bits/second Correct Communications Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication C			Opt.			
RANSMISSION PARAMETERS Mode Technique Communications protocol Code Speed, bits/second Format Multipoint operation Terminal interface Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Controller, purchase Date of first production delivery Display units installed to date Serviced by OMMENTS Simplex Asynchronous Asynchronous Asynchronous Ascil/ANSI ASCII AS	Other vendor-supplied devices				<u> </u>	
Mode Technique Communications protocol Code Communications Comm		wall mounts	wall mounts			
Mode Technique Communications protocol Code Communications Comm	DANICRAICCIONI DADANATTEDO					
Technique Communications protocol Communications protocol Communications protocol Code Start-stop ASCII-77 ASCII-78 ASCII-78 ASCII-78 ASCII-78 ASCII-78 ASCII-78 ASCII-79 ASCI		Simplex	Simplex	Half/full-dunley	Half/full-dunley	Half/full-dupley
Communications protocol Code Code Code Code Code Code Start-stop ASCII/77 ASCII-79 ASCII-79 A	Technique				Asynchronous	Asynchronous
Up to 9600 Up to 9600 Character Character Std. RS-232-C std.; 20mA opt. No No No No No No No No No No No No No	Communications protocol	Start-stop	Start-stop	ASCII/ANSI	ANSI/Honeywell	ASCII/ANSI
Character Std. RS-232-C std.; 20mA opt. RS-232-C std.; 20mA opt. No No No No No No No No No No No No No			ASCII-77			
Multipoint operation Terminal interface RS-232-C std.; 20mA opt. No No No No No No No No No No No No No N						
Terminal interface Integral modem Integral modem Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Controller, purchase Annual prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS RS-232-C std.; 20mA opt. No No No No No No No No No No No No No						No
Integral modem Integral modem IRICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of first production delivery Display units installed to date Serviced by OMMENTS No No No No No No No No No No No No No					RS-232-C std.;	
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS No No No No No No No No No N						
RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS OMM						
Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of first production delivery Display units installed to date Serviced by DIMMENTS 3,000-55,000 1,000-88,000 Included Various		INO	110	110	110	, ,
Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS Included Various	Display station, purchase			1,095	1,595-1,895	1,595/1,795 (APL)
Annual prime-shift maintenance Date of announcement 10/82 Display units installed to date Serviced by OMMENTS Display units installed to date Serviced by OMMENTS Display units installed to date Serviced by Over 15,000 plasma gas discharge displays of various sizes installed throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer- Annual prime-shift maintenance 7/85 11/84 12/84 — Teleray Teleray Teleray Multiprotocol Multiprotocol Multiprotocol Multiprotocol Model 16 APL includes 96 APL chait display is custom built (within cer- Display in the first production delivery 10/82 See comments Telegenix & third party Dover 15,000 plasma gas discharge displays of various sizes installed Throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer-				-		-
Date of announcement 2/82 7/85 11/85 11/85 25ee comments Serviced by Telegenix & third party Over 15,000 plasma gas discharge displays of various sizes installed throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer- Date of first production delivery 10/82 7/85 11/85 21/84 2 2 Telegenix & third party 7-16leray 7-1		various	various			
Date of first production delivery Display units installed to date See comments Telegenix & third party Over 15,000 plasma gas discharge displays of various sizes installed throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer- 11/85 See comments Telegenix & third party Over 15,000 plasma gas discharge displays of various sizes installed throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer-		2/82	7/85	11/84	5/83	3/82
See comments Telegenix & third party Over 15,000 plasma gas discharge dis- plays of various sizes installed throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer- Serviced by See comments Telegenix & third party Over 15,000 plasma gas discharge dis- plays of various sizes installed throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer-	Date of first production delivery	10/82	11/85			
DMMENTS party		See comments	See comments	l	I _ .	<u> </u>
OVer 15,000 plasma gas discharge displays of various sizes installed throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer-built (withi	Serviced by			l eleray	ı eleray	ı eleray
gas discharge displays of various sizes installed throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer-	OMMENTS		Over 15,000 plasma	Multiprotocol	Multiprotocol	Multiprotocol
plays of various sizes installed sizes installed throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer- plays of various sizes installed sizes install			gas discharge dis-			1
throughout the U.S. Canada, Europe, & Saudi Arabia; each display is custom built (within cer- built (within cer-		plays of various	plays of various			
Canada, Europe, & Canada, Europe, & Saudi Arabia; each display is custom built (within cer- built (within cer-						cludes 96 APL char
Saudi Arabia; each display is custom built (within cer- built (within cer-					1 .	
display is custom display is custom built (within cer- built (within cer-						
		display is custom	display is custom		1	
		built /within car-	I built (within car-	1	1	i .

Maximum displays/controller Fransportability BM compatibility Feletype compatibility Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Coreen arrangement, lines x char./line Coreen area (diagonal), inches	Standalone — No No Std. Data General D210, DEC VT220 1920-3168	Standalone No No Std. HP 2622/2624, DEC	Standalone — No	Standalone	Standalone
Fransportability BM compatibility Feletype compatibility Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Goreen arrangement, lines x char./line	No Std. Data General D210, DEC VT220 1920-3168	No Std. HP 2622/2624, DEC			1
BM compatibility Feletype compatibility Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Green arrangement, lines x char./line	No Std. Data General D210, DEC VT220 1920-3168	No Std. HP 2622/2624, DEC		No	No
Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Coreen arrangement, lines x char./line Coreen area (diagonal), inches	Data General D210, DEC VT220 1920-3168	HP 2622/2624, DEC	No	No	No
SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Screen area (diagonal), inches	DEC VT220 1920-3168		Std. Honeywell VIP7305,	Std. Honeywell VIP7813,	Std. See comments
Display capacity, no. of char. Memory capacity, no. char./lines/pages Boreen arrangement, lines x char./line Boreen area (diagonal), inches		VT102, ANSI X3.64	DEC VT102, ANSI	DEC VT102, ANSI	
Memory capacity, no. char./lines/pages creen arrangement, lines x char./line creen area (diagonal), inches		1920	1920-3168	1920-3168	1920
Screen area (diagonal), inches	3840 char.	4000 char.	5760 char.	5760 char.	1 page
Screen area (diagonal), inches	24x80/132 plus status line	24x80	24x80/132	24x80/132	24x80
Filt /ewiyal eargen	14; 9 & 12 opt.	14; 9 & 12 opt.	14; 9 & 12 opt.	14; 9 & 12 opt.	14
	Std. 128	Std. 256	Std. 255	Std. 255	Std. 128 ASCII
	8x10 dot matrix	8x10 dot matrix	8x10 dot matrix	8x10 dot matrix	6x8 dot matrix
	Green or amber	Green or amber	Green or amber	Green or amber	P31 green or amber
Color capability	No	No	No	No	No
Graphics	Opt.	Tektronix 4014 opt.	Tektronix 4014 opt.	Tektronix 4014 opt.	No
Programmable field/char. highlighting via: Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
	Std.	Std.	Std.	Std.	Std.
	Std. Std.	Dim/bold Std.	Dim/bold Std.	Dim/bold Std.	Std. Std.
Double size	Std.	Std.	Std.	Std.	No
	Std. 1 std; 2 opt.	Up/down, smooth 2 std.	Up/down, smooth 3 std.	Up/down, smooth 3 std.	Up/down std.
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
	Both std.	Both std.	Both std.	Both std. Std.	Both std. Std.
	Std. Std.	Std.	Std. Std.	Std.	Std.
Split screen/windows	STd.	Std.	Std.	Std.	No
	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.
ine insert/delete	Std.	Std.	Std.	Std.	Std.
Frase	Char./line/screen/ memory std.	Char./line/screen/ memory std.	Char./line/screen/ memory std.	Char./line/screen/ memory std.	Char./line/screen std.
YBOARD PARAMETERS		1	1	1	
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128 ASCII
	Std. 32/64 user-defined	Std. 32 std. (screen-	Std. 32 std.	Std. 32 std.	Std. 16 std.
	•	labelled)		1	
Numeric keypad NCILLARY DEVICES	Std.	Std.	Std.	Std.	Std.
	No	No	No	No	No
ine printer, type, and speed	No	No	No	No	No
	Opt. Std.	Opt. Std.	Opt. Std.	Opt. Std.	Opt. Std.
Other vendor-supplied devices					
RANSMISSION PARAMETERS	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Fechnique Page 1	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Communications protocol Code	ANSI/DG ASCII	ANSI/HP ASCII	ANSI/Honeywell ASCII	ANSI/Honeywell	ASCII
Speed, bits/second	50-19,200	50-19,200	50-19,200	50-19,200	50-19,200
ormat	Char./line/block	Char./line/block	Char./line/block	Char./line/block	Char./line/block
Multipoint operation Ferminal interface	No RS-232-C std;	No RS-232-C std.;	No RS-232-C, RS-422	No RS-232-C, RS-422	No RS-232-C
	20mA opt.	RS-422, 20mA opt.	std.; 20mA opt.	std.; 20mA opt.	
ntegral modem ntegral acoustic coupler	No No	No No	No No	No No	No No
RICING AND AVAILABILITY		[-			
Display station, purchase Controller, purchase	1,195 	1,095/1,195	1,295	1,595	409
Monthly prime-shift maintenance		_		-	-
Annual prime-shift maintenance Date of announcement	 11/84	3/85	12/85	1/86	1985
Date of first production delivery	12/84	4/85	1/86	3/86	1985
Display units installed to date Serviced by	— Teleray	Teleray	Teleray	Teleray	GE Instr. & Comm.
·				1	
OMMENTS	Multiprotocol	Multiprotocol	Multiprotocol	Multiprotocol	Emulations include: ADDS Regent 25 & Viewpoint A2, Lear Siegler, Hazeltine, TeleVideo 910, 910+, & 925

ERMINAL DESCRIPTION Standalone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Standalone				
Standalone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility	Standalone				<u> </u>
Transportability IBM compatibility Teletype compatibility		Standalone	Standalone	Standalone	Standalone
BM compatibility Teletype compatibility			 	_	
Teletype compatibility	No	No	No	No	No
	No	No	No	No Std.	No Std.
	Std.	Std.	Std. DEC VT220/VT100/	TeleVideo 925/	Sta.
other compatibility		1	VT52	950	
ISPLAY PARAMETERS		1			
Display capacity, no. of char.	1920	1920	1920	1920	1920
Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line	80/24/1 24x80	1 page 24x80	1 page 24x80/132	4 pages 24x80 plus status	80/24/4 24x80
octeen arrangement, lines x char./line	24x60	24860	24x00/132	line	24x60
Screen area (diagonal), inches	12	12	12	12	12
Tilt/swivel screen	Swivel std.	Std.	Std.	Std.	Std.
Total displayable symbols	128 ASCII	128 ASCII	128 ASCII/ANSI	128 ASCII+graphics	128 ASCII
Symbol formation Character phosphor	6x7 dot matrix	7x8 dot matrix	6x8 dot matrix	6x8 dot matrix P31 green	10x7 dot matrix
naracter phosphor	P31 green	P31 green or amber	P31 green or amber	P3 i green	P31 green
Color capability	No	No	No	No	No
Graphics	No	Std. (15 char.)	Std. (96 char.)	Std.	15 graphics symbol
Programmable field/char. highlighting via:	la	la.,	la.,	la	la.,
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank Bold	Std. No	Std. Std.	Std. Std.	Std.	Std. Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	No	No.	No	No	No
Scroll	Up/down std.	Std.	Std.	Std.	Up/down std.
Paging	1 std.	_	Std.	Std.	4 opt.
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both std.	Std.	Std.	Both std.	Both std.
Protected format	Std.	Std.	Std.	Std.	Std.
artial screen transmit	No	Std.	Std.	Std.	Std.
plit screen/windows	No	No	No	Std.	No
abulation Character insert/delete	Fwd./back std. Std.	Std. Std.	Std. Std.	Fwd./back std. Std.	Fwd./back std. Std.
ine insert/delete	Std.	Std.	Std.	Std.	Std.
rase	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen
	std.	std.	std.	std.	std.
YBOARD PARAMETERS					
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128 ASCII
Detachability	No ASCII	Std.	Std.	Std.	Std.
Program function keys	No	32 non-volatile	30 non-volatile	32 std.	22 std.
,-		std.	std.		İ
lumeric keypad	Std.	Std. (true acctg.)	Std. (true acctg.)	Std.	Std.
NCILLARY DEVICES	1	l.,	l.,	1	l.,
Serial printer, type, and speed Line printer, type, and speed	No	No No	No No	No No	No No
Composite video	No Opt.	Opt.	Opt.	Opt.	Opt.
Port for custsupplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices	_		-	-	
RANSMISSION PARAMETERS	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
viode Technique	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Communications protocol			ANSI X3.64		
ode	ASCII	ASCII	ASCII	ASCII	ASCII
peed, bits/second	50-19,200	150-19,200	150-19,200	Up to 19,200	50-19,200
ormat	Char./line/block	Char./block	Char./block	Char./block	Char./line/block
fultipoint operation	No	No	No	No	No
erminal interface	RS-232-C std.;	RS-232-C std.;	RS-232-C std.;	RS-232-C std.;	RS-232-C std.;
stearal modern	20mA opt.	RS-422 or 20mA opt.	20mA opt.	RS-422 or 20mA opt.	20mA opt.
ntegral modem ntegral acoustic coupler	Opt. No	No No	No No	Opt. No	Opt. No
ICING AND AVAILABILITY	1	1	1		1
Display station, purchase	649	695	795	899	1,195
Controller, purchase			[[
Monthly prime-shift maintenance				_	
Annual prime-shift maintenance		-	I=	1	1-00
Date of announcement	2/82	5/84	5/84	4/83	12/80
Date of first production delivery	2/82	9/84	11/84	8/83	1/81
Display units installed to date Serviced by	GE Instr. & Comm.	GE Instr. & Comm.	GE Instr. & Comm.	GE Instr. & Comm.	Over 40,000 GE Instr. & Comm.
on vided by	GE IIISII. & COMM.	GE MISU. & COMMI.	GE man. & Comm.	GE MOU. & COMMI.	Joe man. & Comm.
DMMENTS					

	TeleVideo 955	TeleVideo 970	TeleVideo Personal Terminal (PT)	Telex TC 078	Telex TC 079
ERMINAL DESCRIPTION	,				
Standalone or cluster	Standalone	Standalone	Standalone	Cluster	Cluster
Maximum displays/controller		_		32	32
Transportability	No	No	Yes	No	No
IBM compatibility	No	No	No	3178/3278	3179/3279
Teletype compatibility	Std.	No DEC VITAGO (VITEO	Std.	No	No
Other compatibility	<u> </u>	DEC VT100/VT52		_	
ISPLAY PARAMETERS					
Display capacity, no. of char.	1920	1920	1920	1920	1920
Memory capacity, no. char./lines/pages	4 pages	3 pages	1 page		
Screen arrangement, lines x char./line	24x80/132	24x80/132	24x40/80	24x80	24x80
.	1	14		40	40
Screen area (diagonal), inches Tilt/swivel screen	14 Std.	Tilt std.	9 No	12 Std.	12 Std.
Total displayable symbols	128 ASCII	128	128 ASCII	96 EBCDIC	96 EBCDIC
Symbol formation	10x7 dot matrix	7x8 dot matrix	5x7 dot matrix	9x12 in 9x16 cell	9x12 in 9x16 cell
Character phosphor	P31 green or amber	P31 green	P9 yellow-green	Green or amber	Color
ondrastor priosprior	l o r groom or ambor	, e, g. co	, o , o g. co	Green er amber	100.0.
Color capability	No	No	No	No	4/7 colors
Graphics	15 graphics symbols	No	Std. (128 char.)	No	No
Programmable field/char. highlighting via:	0.4	0.4	امنا	N =	l
Underline	Std.	Std.	Std.	No	No
Blink Blank	Std. Std.	Std.	Std.	No No	No No
Bold	No	Std. Std.	Std.	No No	No No
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	No	Std.	Std.	No.	No
Scroll	Up/down std.	Up/down std.	Std.	No	No
Paging	4 std.	3 std.	1 std.	No	No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both std.	Std.	Std.	Both std.	Both std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit	No	Std.	Std.	Std.	Std.
Split screen/windows	No	3 std.	No	No	No
Tabulation	Fwd./back std.	Fwd./back std.	Std.	Fwd./back std.	Fwd./back std.
Character insert/delete Line insert/delete	Std. Std.	Std. Std.	Std. Std.	Std. No	Std. No
Erase	Char./line/screen	Char./line/field	Std.	Char./screen std.	Char./screen std.
Liase	std.	std.	Old.	Char, screen sta.	Criar./ screen stu.
EYBOARD PARAMETERS	ota.	10.0.	'		
Style	Typewriter	Typewriter	Typewriter	Typewriter, data	Typewriter, data
	1.77	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	',	entry	entry
Character/code set	128 ASCII	128 ASCII	128 ASCII	EBCDIC	EBCDIC
Detachability	Std.	Std.	No	Std.	Std.
Program function keys	64 std.	32 non-volatile	14 std.	24 std. (typewriter	24 std. (Typewriter
Alicens and a discourse of	0.4	lo. 4	la.	only)	only)
Numeric keypad NCILLARY DEVICES	Std.	Std.	No	Std.	Std.
Serial printer, type, and speed	No	No	No	Std.	Std.
Line printer, type, and speed	No	No	No	Std.	Std.
Composite video	Opt.	Opt.	Opt.	No	No
Port for custsupplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices		No	<u> </u>	Security keylock,	Security keylock,
			1	numeric lock,	numeric lock,
				audible alarm	audible alarm
DANCHICCIONI DADARACTOR					
RANSMISSION PARAMETERS Mode	Holf/full dumley	Half/full-duplex	Half/full_dupley	Half-duplay	Half dupley
моде Technique	Half/full-duplex Asynchronous	Asynchronous	Half/full-duplex Asynchronous	Half-duplex Synchronous	Half-duplex Synchronous
Communications protocol		ANSI X3.64		BSC, SNA/SDLC	BSC, SNA/SDLC
Code	ASCII	ASCII	ASCII	EBCDIC	EBCDIC
Speed, bits/second	50-19,200	50-19,200	150-19,200	Up to 19,200	Up to 19,200
Format	Char./line/block	Char./line/fld./blk.	Char./line/block	Block	Block
Multipoint operation	No	No	No	Std.	Std.
Terminal interface	RS-232-C	RS-232-C std.;	RS-232-C	Coaxial	Coaxial
		RS-422 or 20mA opt.		l	1
	Opt.	Opt.	Opt. (300/1200 bps)	No	No
Integral modem	No	No	No	No	No
Integral acoustic coupler	1	1,495	499	1,550	2,195
Integral acoustic coupler RICING AND AVAILABILITY	1600	11,400		4,500-13,000	4,500-13,000
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase	699		1		12
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase	699 — —		I—	19	
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance	699 		_	9	<u></u>
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance	699 — — — — 1985	 6/82		9 8/84	8/84
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery					
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date		1/83	11/83	8/84 8/84 —	8/84 8/84 —
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date	 1985	6/82 1/83 GE Instr. & Comm.		 8/84	8/84
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by		1/83	GE Instr. & Comm.	8/84 8/84 — Telex	8/84 8/84
		1/83	11/83 — GE Instr. & Comm. Optional telephone	8/84 8/84 — Telex	
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by		1/83	11/83 GE Instr. & Comm. Optional telephone handset for voice	8/84 8/84 — Telex Part of TC 270 Information Display	
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by		1/83	11/83 — GE Instr. & Comm. Optional telephone	8/84 8/84 — Telex Part of TC 270 Information Display System; attaches to	
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by		1/83	11/83 GE Instr. & Comm. Optional telephone handset for voice	8/84 8/84 — Telex Part of TC 270 Information Display System; attaches to 076, 174 & 274C	8/84 8/84 — Telex Part of TC 270 Information Display System; attaches t 076, 174 & 274C
Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by		1/83	11/83 GE Instr. & Comm. Optional telephone handset for voice	8/84 8/84 — Telex Part of TC 270 Information Display System; attaches to 076, 174 & 274C controllers, 276	8/84 8/84 — Telex Part of TC 270 Information Display System; attaches t 076, 174 & 274C controllers, 276
Integral acoustic coupler RIGING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by OMMENTS		1/83	11/83 GE Instr. & Comm. Optional telephone handset for voice	8/84 8/84 ——————————————————————————————	8/84 8/84
ntegral acoustic coupler ALLABILITY Display station, purchase Controller, purchase Controller, purchase Wonthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by		1/83	11/83 GE Instr. & Comm. Optional telephone handset for voice	8/84 8/84 7-Telex Part of TC 270 Information Display System; attaches to 076, 174 & 274C controllers, 276 control/display, & equivalent IBM	8/84 8/84 — Telex Part of TC 270 Information Display System: attaches t 076, 174 & 274C controllers, 276 control/display, & equivalent IBM
ntegral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Derviced by DMMENTS		1/83	11/83 GE Instr. & Comm. Optional telephone handset for voice	8/84 8/84 ——————————————————————————————	8/84 8/84 — Telex Part of TC 270 Information Display System; attaches of O76, 174 & 274C controllers, 276 control/display, &

Asximum displays/controller Transportability Maximum displays/controller Transportability Maximum displays/controller Transportability Selectype compatibility SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Green arrangement, lines x char./line Green area (diagonal), inches Grit/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Trogrammable field/char. highlighting via: Underline Blink Blank Blank Blank Bold Reverse Double size Grotel Green area (diagonal), inches Selectable cursor blinking Addressable/readable cursor Protected format Cartial screen transmit Split screen/windows Tabulation Character insert/delete Ine insert/delete	TC 080 Cluster 32 No 3180 No — 1920-3564 — 24/32/43x80, 27x132 15 Std. 96 EBCDIC Various Green No No No No No No No No No No No No No N	TC 179 Cluster 32 No 3179 No — 1920-3440 —24/32/43x80 14 Std. 96 EBCDIC Various Color 7 colors No	Cluster 32 No 3178/3278 No — 1920 — 24x80 12 Opt. 96 EBCDIC 7x12 dot matrix Green	TC 276 Either 8 No 3276 No — 1920-3564 — 24/32/43x80, 27x132 15 Opt. 96 EBCDIC/ASCII	Cluster 32 No 3278 No — 1920-3564 — 24/32/43x80, 27x132 15
Standalone or cluster //aximum displays/controller //aransportability BM compatibility Eletype compatibility Other compatibility SPLAY PARAMETERS Display capacity, no. of char. //emory capacity, no. char./lines/pages //ecreen arrangement, lines x char./line Screen area (diagonal), inches //ilit/swivel screen //otal displayable symbols //emory capacity //estandalone //estandal	32 No 3180 No — 1920-3564 — 24/32/43x80, 27x132 15 Std. 96 EBCDIC Various Green No No	32 No 3179 No — 1920-3440 — 24/32/43x80 14 Std. 96 EBCDIC Various Color 7 colors	32 No 3178/3278 No — 1920 — 24x80 12 Opt. 96 EBCDIC 7x12 dot matrix	8 No 3276 No — 1920-3564 — 24/32/43x80, 27x132 15 Opt. 96 EBCDIC/ASCII	32 No 3278 No — 1920-3564 — 24/32/43x80, 27x132
Maximum displays/controller Transportability Maximum displays/controller Transportability Maximum displays/controller Transportability Selectype compatibility Teletype compatibility SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. of char. Memory capacity, no. of char. Memory capacity, no. char./lines/pages Coreen area (diagonal), inches Titt/swivel screen Total displayable symbols Symbol formation Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Blink Blank Bold Blink Bold Blink Bold Bold Blink Bold Bold Blink Bold Blink Bold Blink Bold Bold Blink Bold Bold Bold Bold Bold Bold Bold Bold	32 No 3180 No — 1920-3564 — 24/32/43x80, 27x132 15 Std. 96 EBCDIC Various Green No No	32 No 3179 No — 1920-3440 — 24/32/43x80 14 Std. 96 EBCDIC Various Color 7 colors	32 No 3178/3278 No — 1920 — 24x80 12 Opt. 96 EBCDIC 7x12 dot matrix	8 No 3276 No — 1920-3564 — 24/32/43x80, 27x132 15 Opt. 96 EBCDIC/ASCII	32 No 3278 No — 1920-3564 — 24/32/43x80, 27x132
Transportability BM compatibility BM compatibility Other compatibility Other compatibility Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Jemory capacity, no. char./lines/pages Gereen arrangement, lines x char./line Screen area (diagonal), inches Titt/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Trogrammable field/char. highlighting via: Underline Blink Blink Blink Bold Reverse Double size Scroll Saging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Line insert/delete Line insert/delete Line insert/delete Line insert/delete Line insert/delete Line insert/delete Line insert/delete Line insert/delete Line insert/delete Line insert/delete Line insert/delete Line Line Line Line Line Line Line Line	No 3180 No — — — — — — — — — — — — — — — — — —	No 3179 No	No 3178/3278 No — 1920 — 24x80 12 Opt. 96 EBCDIC 7x12 dot matrix	3276 No — 1920-3564 — 24/32/43x80, 27x132 15 Opt. 96 EBCDIC/ASCII	No 3278 No — 1920-3564 — 24/32/43x80, 27x132
Feletype compatibility Other compatibility Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Memory capacit	No	No	No	No — 1920-3564 — 24/32/43x80, 27x132 15 Opt. 96 EBCDIC/ASCII	No — 1920-3564 — 24/32/43x80, 27x132
Other compatibility SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. of char. Memory capacity, no. char./lines/pages Gereen area (diagonal), inches Citt/swivel screen Cotal displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blink Blink Bold Reverse Double size Goroll Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Capability Control Color capability C	1920-3564 24/32/43x80, 27x132 15 Std. 96 EBCDIC Various Green No No	1920-3440 24/32/43x80 14 Std. 96 EBCDIC Various Color 7 colors	1920 24x80 12 Opt. 96 EBCDIC 7x12 dot matrix	1920-3564 24/32/43x80, 27x132 15 Opt. 96 EBCDIC/ASCII	1920-3564
SPLAY PARAMETERS Display capacity, no. of char. Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line Screen area (diagonal), inches Till/swivel screen Total displayable symbols Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Bold Reverse Double size Scroll Seaging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete	24/32/43x80, 27x132 15 Std. 96 EBCDIC Various Green No No	24/32/43x80 14 Std. 96 EBCDIC Various Color 7 colors	24x80 12 Opt. 96 EBCDIC 7x12 dot matrix	24/32/43x80, 27x132 15 Opt. 96 EBCDIC/ASCII	24/32/43x80, 27x132
Display capacity, no. of char. Idemory capacity, no. char./lines/pages Screen arrangement, lines x char./line Coreen area (diagonal), inches Citt/swivel screen Cotal displayable symbols Symbol formation Character phosphor Color capability Graphics Corgrammable field/char. highlighting via: Underline Blink Blink Bold Reverse Double size Scroll Vaging Selectable cursor blinking Addressable/readable cursor Protected format Cartial screen transmit Split screen/windows Cabulation Character insert/delete Circle insert/delete Circl	24/32/43x80, 27x132 15 Std. 96 EBCDIC Various Green No No	24/32/43x80 14 Std. 96 EBCDIC Various Color 7 colors	24x80 12 Opt. 96 EBCDIC 7x12 dot matrix	24/32/43x80, 27x132 15 Opt. 96 EBCDIC/ASCII	24/32/43x80, 27x132
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Green area (diagonal), inches Citt/swivel screen Cotal displayable symbols Symbol formation Character phosphor Color capability Graphics Corgrammable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Groroll Vaging Gelectable cursor blinking Addressable/readable cursor Corotected format Cartial screen transmit Split screen/windows Cabulation Character insert/delete Circle ine insert/delete Circle in	27x132 15 Std. 96 EBCDIC Various Green No No No No No	14 Std. 96 EBCDIC Various Color 7 colors	12 Opt. 96 EBCDIC 7x12 dot matrix	27x132 15 Opt. 96 EBCDIC/ASCII	27x132
illity swivel screen (illity swivel screen (illity swivel screen (illity swivel screen (illity swivel screen (illity swivel screen (illity swivel swivel (illity screen (illity screen (illity screen (illity screen (illity screen (illity swivel (il	15 Std. 96 EBCDIC Various Green No No No	Std. 96 EBCDIC Various Color 7 colors	Opt. 96 EBCDIC 7x12 dot matrix	15 Opt. 96 EBCDIC/ASCII	
Color capability Graphics Color capability Graphics Color capability Graphics Grogrammable field/char. highlighting via: Underline Blink Blank Blank Bold Reverse Double size Goroll Graging Gelectable cursor blinking Addressable/readable cursor Grotected format Cartial screen transmit Split screen/windows Cabulation Character insert/delete Grase Graphics Graphic	Std. 96 EBCDIC Various Green No No No No No No	Std. 96 EBCDIC Various Color 7 colors	Opt. 96 EBCDIC 7x12 dot matrix	Opt. 96 EBCDIC/ASCII	
Symbol formation Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Groll Staging Gelectable cursor blinking Addressable/readable cursor Protected format Cratial screen transmit Split screen/windows Cabulation Character insert/delete Line insert/delete	Various Green No No No No No	Various Color 7 colors	7x12 dot matrix	96 EBCDIC/ASCII	Opt.
Character phosphor Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Goroll Paging Gelectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows abulation Character insert/delete Line insert/delete	Green No No No No No	Color 7 colors		9x14 dot matrix	96 EBCDIC/ASCII
Color capability Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Groul Faging Gelectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Fabulation Character insert/delete Line insert/delete	No No No No		ı	Green or white	Green or white
Graphics Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Groull Paging Gelectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Popits screen/windows Pabulation Character insert/delete Line insert/d	No No No No		l	1:.	
Programmable field/char. highlighting via: Underline Blink Blink Bold Reverse Double size Scroll Programmable cursor Protected format Partial screen transmit Split screen/windows Pabulation Pharacter insert/delete Line insert/delete	No No No	1	No No	No No	No No
Underline Blink Blink Bold Reverse Double size Scroll Reging Belectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows abulation Character insert/delete Line insert/delete Linese	No No	1	Ĭ		
Blank Bold Reverse Double size Scroll Aging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Abulation Character insert/delete Line insert/delete Line insert/delete Line and Abulation Character insert/delete Line insert/delete Line insert/delete Line insert/delete Line insert/delete	No	No	No	No	No
Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Pabulation Character insert/delete Line insert/delete Lirase Control of the control of th		No No	No No	No No	No No
Double size Scroll Scroll Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Pabulation Pharacter insert/delete Partial screen sert/delete Pharacter insert/delete Pharacter insert/delete Pharacter insert/delete Pharacter insert/delete Pharacter insert/delete Pharacter insert/delete Pharacter insert/delete Pharacter insert/delete Pharacter insert/delete Pharacter insert/delete		No	No	No	No
Scroll Paging Pa	Std.	Std.	Std.	Std.	Std.
Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Pabulation Character insert/delete Ine insert/delete Frase	No No	No No	No No	No No	No No
Addressable/readable cursor Protected format Sartial screen transmit Split screen/windows Sabulation Sharacter insert/delete ine insert/delete Grase	No	No	No	No	No
Protected format Partial screen transmit Subjet screen/windows Pabulation Character insert/delete Ine insert/delete Frase	Std.	Std.	Std.	Std.	Std.
Partial screen transmit split screen/windows abulation Character insert/delete ine insert/delete crase	Both std. Std.	Both std.	Both std. Std.	Both std. Std.	Both std. Std.
abulation Fharacter insert/delete Sine insert/delete Marace Consistence Consistence Consistence Consistence Consistence Consistence Consistence Consistence Consistence Consistence Consistence Consistence Consistence Cons	Std.	Std.	Std.	Std.	Std.
Character insert/delete Sine insert/delete insert/delete crase	No	No	No	No	No
ine insert/delete rase	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.	Fwd./back std. Std.
	No.	No.	No	No.	No.
VROARD PARAMETERS	Char./screen std.	Char./screen std.	Char./screen std.	Char./screen std.	Char./screen std.
	Typewriter, data	Typewriter, data	Typewriter, data	Typewriter, data	Typewriter, data
	entry	entry	entry	entry	entry
	EBCDIC Std.	EBCDIC Std.	EBCDIC/ASCII-B Std.	EBCDIC/ASCII Std.	EBCDIC/ASCII Std.
	24 std. (typewriter	24 std. (Typewriter	12/24 std.	12/24 std.	12/24 std.
· c	only)	only)			
lumeric keypad NCILLARY DEVICES	Std.	Std.	Std.	Std.	Std.
	Std.	Std.	Std.	Std.	Std.
ine printer, type, and speed	Std.	Std.	No	Std.	Std.
	No Std.	No Std.	No Std.	No Std.	No Std.
	Security keylock,	Security keylock,	Security keylock,	Security lock,	Security lock,
i.i.	numeric lock,	numeric lock,	numeric lock,	audible alarm,	audible alarm,
ļa	audible alarm	audible alarm	audible alarm	light pen	light pen
RANSMISSION PARAMETERS					
/lode H	Half-duplex	Half-duplex	Half-duplex	Half-duplex	Half-duplex
	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC
	EBCDIC	EBCDIC	EBCDIC	EBCDIC	EBCDIC/ASCII-B
Speed, bits/second	Up to 19,200	Up to 19,200	2400-9600	2400-9600	2400-9600
	Block Std.	Block Std.	Block Std.	Block Std.	Block Std.
	Std. Coaxial	Coaxial	Coaxial	Coaxial	Coaxial
			i		1
	No No	No No	No No	No No	No No
ntegral acoustic coupler RICING AND AVAILABILITY	140	140	140	140	140
Display station, purchase 2	2,195	2,295-2,995	1,550	5,350-6,150	2,100-2,800
	4,500-13,000 13	4,500-13,000	4,500-13,000 12	30	4,500-13,000 12-15
Annual prime-shift maintenance -		14	ļ		
Date of announcement 1	1984	1984	6/82	6/79	6/79
	1984	1984	2nd quarter/82	8/79	8/79
Display units installed to date Serviced by	Telex	Telex	Telex	Telex	Telex
		1	İ		
	Part of TC 270	Part of TC 270	Part of TC 270	Part of TC 270	Part of TC 270
	Information Display System; attaches to	Information Display System; attaches to	Information Display System; attaches to	Information Display System; control	Information Displa System; attaches
0	076, 174 & 274C	076, 174 & 274C	076, 174 & 274C	unit/display	076, 174 & 2740
lo	controllers, 276	controllers, 276	controllers, 276	station; can oper-	
		control/display, &			controllers, 276
	control/display, & equivalent IBM	equivalent IBM	control/display, & equivalent IBM	ate as standalone unit, or connect up	controllers, 276 control/display, 8 equivalent IBM

VENDOR AND MODEL	Telex TC 279	Telex TC 476	Telex TC 479	Term-Tronics Miracle-178	Term-Tronics Miracle-179
ERMINAL DESCRIPTION					
Standalone or cluster	Cluster	Either	Either	Cluster	Cluster
Maximum displays/controller Transportability	32 No	16 No	16 No	32 Handcarry (25 lbs.)	32 39 lbs.
IBM compatibility	3279	3270	3270	3178/3278-2	3179
Teletype compatibility	No	No	No	Opt.	No
Other compatibility	-		_	IBM 3101-20	
ISPLAY PARAMETERS	1000 0440	1000	1000	1000	1000 /
Display capacity, no. of char. Memory capacity, no. char./lines/pages	1920-3440	1920	1920	1920 4K	1920 (see commer
Screen arrangement, lines x char./line	24/32/43x80	24x80	24x80 plus status	24x80 plus status	24x80 plus status
•	1 ' '		line	line	line
Screen area (diagonal), inches	15	15	15	12	14
Tilt/swivel screen Total displayable symbols	Opt. 96 EBCDIC/ASCII	Opt. 96 EBCDIC	Opt. 96 EBCDIC	Std. 96 EBCDIC/ASCII	Std. 96 EBCDIC/ASCII
Symbol formation	9x14 dot matrix	8x15 dot matrix	8x15 dot matrix	9x14 dot matrix	9x16 dot matrix
Character phosphor	Color	White or green	Color	P39 green/amber	Color
Color capability	4 colors std.	No	4 colors	No	4/7 colors
Graphics	No		No	No	No
Programmable field/char. highlighting via:	No.	No	No	Cod	24
Underline Blink	No No	No No	No No	Std.	Std. Std.
Blank	No	No	No	Std.	Std.
Bold	No	No	No	Std.	Std.
Reverse	Std.	Std.	Std.	Opt.	Std.
Double size Scroll	No No	No No	No No	No No	No No
Paging	No	No	No	No	No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Std.	Std.
Protected format Partial screen transmit	Std.	Std.	Std. Std.	Std.	Std. Std.
Split screen/windows	No.	No	No	No	No
Tabulation	Fwd./back std.	Std.	Std.	Std.	Std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete Erase	No Char./screen std.	No Char./screen std.	No Char./screen std.	No Std.	No Std.
L1436	Char./Screen std.	Char./screen std.	Cildi./Screen stu.	Siu.	Std.
EYBOARD PARAMETERS	T	T			
Style	Typewriter, data entry	Typewriter, data entry	Typewriter, data entry	Typewriter	Typewriter (122- key)
Character/code set	EBCDIC/ASCII-B	EBCDIC	EBCDIC	96 EBCDIC	96 EBCDIC
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	12/24 std.	12/24 std.	12/24 std.	24 std.	24 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES	l				0.0.
Serial printer, type, and speed	Std.	Std.	Std.	160 cps impact	Opt.
Line printer, type, and speed Composite video	Std. No	Std. No	Std. No	No No	No No
Port for custsupplied devices	Std.	Std.	Std.	Opt.	Opt.
Other vendor-supplied devices	Security lock,		Security keylock,	Laser scanners,	Printers, APL,
	audible alarm,		audible alarm,	printers	light pen
	light pen		light pen opt.		
RANSMISSION PARAMETERS	l.,		1		
Mode	Half-duplex Synchronous	Half/full-duplex Synchronous	Half/full-duplex	Half-duplex	Half-duplex
Technique Communications protocol	BSC, SNA/SDLC	BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC	Synchronous BSC, SNA/SDLC
Code	EBCDIC	EBCDIC	EBCDIC	EBCDIC/ASCII	EBCDIC/ASCII
Speed, bits/second	2400-9600	Up to 9600	Up to 9600	Channel speed	Channel speed
Format	Block	Block	Block	Block	Block
Multipoint operation Terminal interface	Std. Coaxial	Std. Coaxial	Std. Coaxial	Std. RG62A/U coax (Type	Std. RG62A/U coax (Ty
Terrima interrace	Coaxidi	Coaxiai	Coaxiai	A) & twisted-pair	A) & twisted-pair
Integral modem	No	No	No	Opt.	No
Integral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY Display station, purchase	3,350-3,850	2,800	4,200	995	2,095
Controller, purchase	4,500-13,000		I—	 —	
Monthly prime-shift maintenance	12-14	30	30	6.50	Contact vendor
Annual prime-shift maintenance Date of announcement	1/82	5/82	9/83	8/84	12/85
Date of announcement Date of first production delivery	1/82 1st Q./1982	8/82	9/83	8/84	12/85
Display units installed to date	l— '	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Serviced by	Telex	Telex	Telex	TTI (over 130	Contact vendor
Serviced by	Part of TC 270	Part of TC 270	Part of TC 270	locations)	Ontions institute:
•		Information Display	Information Display	Miracle-178D—w/opt .screen printer	Options include: keylock; light pen;
COMMENTS					printer port; APL
•	Information Display System; attaches to	System; up to 16	System; up to 16	port; iviiracie- i /8P	printer port, ALL
,	Information Display System; attaches to 076, 174 & 274C	System, up to 16 476s and/or 479s	479s and/or 476s	port; Miracle-178P	keycaps; Model 3
•	Information Display System; attaches to 076, 174 & 274C controllers, 276	System; up to 16 476s and/or 479s may be daisy-	479s and/or 476s may be daisy-	w/opt. 3287 sys. printer port;	keycaps; Model 3 screen format;
•	Information Display System; attaches to 076, 174 & 274C controllers, 276 control/display, &	System; up to 16 476s and/or 479s may be daisy- chained; available	479s and/or 476s	w/opt. 3287 sys. printer port; Miracle-178/101—	keycaps; Model 3 screen format; cluster controllers
·	Information Display System; attaches to 076, 174 & 274C controllers, 276	System; up to 16 476s and/or 479s may be daisy- chained; available in library terminal	479s and/or 476s may be daisy-	w/opt. 3287 sys. printer port; Miracle-178/101— w/opt. 3101 ASCII	keycaps; Model 3 screen format;
,	Information Display System; attaches to 076, 174 & 274C controllers, 276 control/display, & equivalent IBM	System; up to 16 476s and/or 479s may be daisy- chained; available	479s and/or 476s may be daisy-	w/opt. 3287 sys. printer port; Miracle-178/101—	keycaps; Model 3 screen format; cluster controllers

VENDOR AND MODEL	Term-Tronics 3270-X	Texas Instruments 931	Thomas Engineering TE-780xA	Thomas Engineering TE-780xV	Thomas Engineering TE-780xS
ERMINAL DESCRIPTION					
Standalone or cluster	Either	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller	1/5/12 32 lbs.	N-	No	No	NI-
Transportability BM compatibility	32 lbs. 3275/3276/3278	No No	No No	No No	No No
Teletype compatibility	Opt.	Std.	Std.	Std.	No
Other compatibility			Honeywell VIP 7801	Honeywell VIP 7801,	Honeywell VIP 78
, ,		1	1	DEC VT100/52, ANSI	,
SPLAY PARAMETERS		I	1	1.	
Display capacity, no. of char.	1920	2000	2000	2000	2000
Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line	3168 char. 24x80	1 page 25x80	25x80		25x80
screen arrangement, intes x char./inte	24x60	25x60	25380	25880	25000
Screen area (diagonal), inches	14	12	14	14	14
Filt/swivel screen	Std.	Tilt std.	Std.	Std.	Std.
Total displayable symbols	96 EBCDIC/ASCII	128	128	128	128
Symbol formation	7x12 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix	7x9 dot matrix
Character phosphor	P31 green std.	Green	P31 green	P31 green	P31 green
Color capability	No	No	No	No	No
Graphics	No	No	Std. (11 line draw)	Std. (11 line draw)	Std. (11 line draw)
Programmable field/char. highlighting via:		I	1	1	
Underline	No	Std.	Std.	Std.	Std.
Blink	No	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold	Std.	Std.	High/low intensity	High/low intensity	High/low intensity
Reverse Double size	No No	Std. No	Std. No	Std. No	Std. No
Scroll	No No	Up/down std.	Up/down std.	Up/down std.	Up/down std.
Paging	No	No	No	No	No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Std.	Both std.	Both std.	Both std.	Both std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit Split screen/windows	Std.	Std.	Std.	Std.	Std.
Tabulation	No Std.	No Fwd./back std.	No Fwd./back std.	No Fwd./back std.	No Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	No	Std.	Std.	Std.	Std.
Erase ´	Std.	Char./line/field/	Char./line/screen	Char./line/screen	Char./line/screen
		screen std.	std.	std.	std.
EYBOARD PARAMETERS	_	_	-		-
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	96 EBCDIC	96 ASCII	128 ASCII	128 ASCII	128 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	24 std.	12 std.	12 std.	12 std.	12 std.
	1_	l	l	l	
Numeric keypad NCILLARY DEVICES	Opt.	Std.	Std.	Std.	Std.
Serial printer, type, and speed	Opt.	EIA, 35-150 cps	No	No	No
Line printer, type, and speed	No.	No	No	No	No
Composite video	No	No	No	No	No
Port for cust -supplied devices	Opt.	Std.,EIA output only	Std.	Std.	Std.
Other vendor-supplied devices	Printers	_	-	_	_
RANSMISSION PARAMETERS Mode	Half-duplex	Full-duplex	 Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Synchronous	Asynchronous	Asynchronous	Asynchronous	Synchronous
Communications protocol	BŚC	TTÝ	TTÝ	TTÝ	Honeywell VIP syr
Code	EBCDIC/ASCII	ASCII	ASCII	ASCII	ASCII
Speed, bits/second	9600 Black	300-19,200 Character	50-19,200 Char /taxt/form	50-19,200 Char /toxt/form	2400-19,200 Char /taxt /form
Format Multipoint operation	Block	Character No	Char./text/form	Char./text/form	Char./text/form Std.
Viultipoint operation Terminal interface	Std. RS-232-C	RS-232-C std.;	No RS-232-C or 20mA	RS-232-C or 20mA	RS-232-C or 20m
iai interiado	202.0	fiber optics opt.	THE EDESO OF ZORIA	ZOZ O OI ZOIIM	202-0 01 2011
ntegral modem	No	No	No	No	No
ntegral acoustic coupler	No	No	No	No	No
RICING AND AVAILABILITY Display station, purchase	Contact vendor	1,295(EIA); 1,350	1,695	1,895	1,895
Controller, purchase Monthly prime-shift maintenance	Contact vendor	19	Factory service	Factory service	Factory service
Annual prime-shift maintenance		4.00	Factory service	Factory service	Factory service
Date of announcement	5/82	4/83	12/82	12/82	12/82
Date of first production delivery Display units installed to date Serviced by	6/82 — Contact vendor	9/83 — Texas Instruments	12/82 — Thomas Engineering	12/82 — Thomas Engineering	12/82 — Thomas Engineerii
,					
OMMENTS	Options: DEC VT100 port; printer port	Can be simulta- neously connected to RS-232-C and fiber optics systems; separate buffering for auxiliary support; Int'l keyboards/character sets available	U.L. Listed; F.C.C. compliant; fully recessed connectors unlimited visual & logical display attributes; convection cooled; made in U.S.A.; available in	U.L. Listed; F.C.C. compliant; fully recessed connectors unlimited visual & logical display attributes; convection cooled; made in U.S.A.; available in	U.L. Listed; F.C.C. compliant; fully recessed connecte unlimited visual & logical display attributes; convection cooled made in U.S.A.; available in

VENDOR AND MODEL	3M Whisper Screen Model 1922 DB	Visual 60	Visual 65	Visual 102	Visual 220
ERMINAL DESCRIPTION	Widdel 1922 DB	00		102	220
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller				-	· ·
Transportability IBM compatibility	No No	No No	No No	No No	No No
Teletype compatibility	Std.	Std.	Std.	Std.	Std.
Other compatibility	DEC VT52	See comments	See comments	DEC VT100/VT102/	DEC VT220/VT100
ISPLAY PARAMETERS				VT52	VT52
Display capacity, no. of char.	1920	1920	1920	1920	1920, 3168
Memory capacity, no. char./lines/pages	24K std.; 48K opt.	24-20	1 page	1 page 24x80/132	1 page
Screen arrangement, lines x char./line	24x80	24x80 plus status	24x80 plus status	24x80/132	24x80/132
Screen area (diagonal), inches	9	12	12	14	14
Tilt/swivel screen Total displayable symbols	Tilt std. 128 ASCII	Std. 128 ASCII	Std. 128 ASCII	Std. 128 ASCII	Std. 256 ASCII
Symbol formation	10x12 dot matrix	7x9 in 9x12 cell	7x9 in 9x12 cell	7x9 dot matrix	7x9 in 10x12 cell
Character phosphor	P31 green std.	P31 green std.;	P31 green std.;	P31 green std.	P31 green std.;
Calan annahilia.		amber opt.	amber opt.	NI-	amber opt.
Color capability Graphics	No No	No Line drawing	No Line drawing	No Opt.	No DEC special graph.
Programmable field/char. highlighting via:	İ	ľ	1	•	, , ,
Underline	Std.	Std.	Std.	Std.	Std.
Blink Blank	Std. No	Std. Std.	Std. Std.	Std. Std.	Std. Std.
Bold	No	Dim	Dim	Std.	Std.
Reverse	Std.	Std.	Std.	No	Std.
Double size Scroll	Std. No	No Std.	No Std.	No Up/down, smooth	Std. Up/down, smooth
Paging	No	No	No	No	No
Selectable cursor blinking	No	Std.	Std.	Std.	Std.
Addressable/readable cursor Protected format	Addressable only No	Std. Std.	Both std. Std.	Std. No	Std. No
Partial screen transmit	No	Std.	Std.	Std.	Std.
Split screen/windows	No	No	No	No	No
Tabulation Character insert/delete	Forward std. Std.	Std. No	Std. Std.	Fwd./back std. Std.	Fwd./back std. Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Line/screen std.	Line/field/page	Char./line/screen	Char./line/screen	Char./line/screen
EYBOARD PARAMETERS		std.	std.	std.	std.
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Observation de la contraction	100 100"	100 100	100 100"	100 100	050 4000
Character/code set Detachability	128 ASCII Std.	128 ASCII Std.	128 ASCII Std.	128 ASCII Std.	256 ASCII Std.
Program function keys	12 std.	No	12 std.	8 std.	15/30 std.
Ni		0.1	0.4	O. J	0.4
Numeric keypad NCILLARY DEVICES	No	Std.	Std.	Std.	Std.
Serial printer, type, and speed	40 cps thermal	No	No	No	No
Line printer, type, and speed Composite video	No	No	No No	No Std.	No Std.
Port for custsupplied devices	No RS-232-C std.	No Std.	Std.	Opt.	Std.
Other vendor-supplied devices	_	_		Graphics card opt.	
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Full-duplex
Technique Communications protocol	Asynchronous	Asynchronous ANSI	Asynchronous ANSI	Asynchronous ASCII	Asynchronous ASCII
Code	ASCII	ASCII	ASCII	ASCII	ASCII
Speed, bits/second Format	1200 (modem); 9600	75-19,200 Char /block	75-19,200 Char /line /blook	50-19,200 Character	50-19,200 Character
Format Multipoint operation	Character Std.	Char./block	Char./line/block	Character No	Character No
Terminal interface	RS-232-C	RS-232-C std.; 20mA	RS-232-C std.; 20mA	RS-232-C std.; 20mA	RS-232-C std.; 20n
Terrinial interface		opt.	opt.	opt. No	opt.
	Cad (2124)			LINO	No
Integral modem	Std. (212A)	No	No No		No
Integral modem Integral acoustic coupler RICING AND AVAILABILITY	No	No No	No	No	No
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase		No			No 795
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase	No	No No	No	No	
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance	No 1,795-2,243 — 265-365 (on-site)	No No 595 —	No 695 — —	No 1,095 —	795
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement	No 1,795-2,243 — 	No No 595 — — 4/84	No 695 — — — 4/84	No 1,095 — — — 4/83	795
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery	No 1,795-2,243 — 265-365 (on-site)	No No 595 —	No 695 — —	No 1,095 —	795
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement	No 1,795-2,243 — 	No No 595 — — 4/84	No 695 — — — 4/84	No 1,095 — — — 4/83	795
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	No 1,795-2,243 — 265-365 (on-site) 7/85 7/85 — 3M	No No 595 — — 4/84 6/84 — Visual Technology	No 695 — 4/84 6/84 Visual Technology	No 1,095 — — 4/83 5/83 Visual Technology	795 — — 11/84 4/85 Visual Technology
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date	No 1,795-2,243 — 265-365 (on-site) 7/85 7/85	No No 595 — 4/84 6/84	No 695 — — 4/84 6/84	No 1,095 — 4/83 5/83 Visual Technology Tektronix graphics option allows	795 — — — 11/84 4/85
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	No 1,795-2,243 — 265-365 (on-site) 7/85 7/85 — 3M \$185-\$285/yr. depot service; userdefined forms can	No No 595	No 695 — 4/84 6/84 Visual Technology Emulations include: ADDS Viewpoint, Hazeltine Esprit,	No 1,095 — 4/83 5/83 — Visual Technology Tektronix graphics option allows emulation of Tek-	795
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	No 1,795-2,243 ————————————————————————————————————	No No 595 — 4/84 6/84 — Visual Technology Emulations include: ADDS Viewpoint, Hazeltine Esprit, Lear Siegler ADM	No 695 — 4/84 6/84 — Visual Technology Emulations include: ADDS Viewpoint, Hazeltine Esprit, Lear Siegler ADM	No 1,095 — 4/83 5/83 Visual Technology Tektronix graphics option allows	795 — 11/84 4/85 — Visual Technology DEC special graphics; five
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	No 1,795-2,243 — 265-365 (on-site) 7/85 7/85 — 3M \$185-\$285/yr. depot service; userdefined forms can	No No S95	No 695 — 4/84 6/84 Visual Technology Emulations include: ADDS Viewpoint, Hazeltine Esprit,	No 1,095 — 4/83 5/83 — Visual Technology Tektronix graphics option allows emulation of Tek-	795 — 11/84 4/85 — Visual Technology DEC special graphics; five
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	No 1,795-2,243 ————————————————————————————————————	No No 595 — 4/84 6/84 — Visual Technology Emulations include: ADDS Viewpoint, Hazeltine Esprit, Lear Siegler ADM 3A, DEC VT52; features 31-char-acter line drawing	No 695 — 4/84 6/84 Visual Technology Emulations include: ADDS Viewpoint, Hazeltine Esprit, Lear Siegler ADM 3A, DEC VT52; features 31-char- acter line drawing	No 1,095 — 4/83 5/83 — Visual Technology Tektronix graphics option allows emulation of Tek-	795 — — 11/84 4/85 — Visual Technology DEC special graphics; five
Integral modem Integral acoustic coupler RICING AND AVAILABILITY Display station, purchase Controller, purchase Monthly prime-shift maintenance Annual prime-shift maintenance Date of announcement Date of first production delivery Display units installed to date Serviced by	No 1,795-2,243 ————————————————————————————————————	No No 595	No 695 — 4/84 6/84 — Visual Technology Emulations include: ADDS Viewpoint, Hazeltine Esprit, Lear Siegler ADM 3A, DEC VT52; features 31-char-	No 1,095 — 4/83 5/83 — Visual Technology Tektronix graphics option allows emulation of Tek-	795 — — 11/84 4/85 — Visual Technology DEC special graphics; five

VENDOR AND MODEL	Visual 240	Visual 241	Visual 300	Visual 330	Visual 383
	240	241	300	330	363
ERMINAL DESCRIPTION Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller		_	_	_	_
Transportability	No	No.	No	No	No
IBM compatibility Teletype compatibility	No Std.	No Std.	No Std.	No Std.	No Std.
Other compatibility	DEC VT220/VT100/	DEC VT220/VT100/	ANSI X3.64	See comments	Burroughs TD830
· · · ·	VT52; Tektronix	VT52; Tektronix	'		
DISPLAY PARAMETERS Display capacity, no. of char.	2320, 3828	2320, 3828	1920	1920	1920
Memory capacity, no. char./lines/pages	1 page	1 page	8 pages	1 page	1 page
Screen arrangement, lines x char./line	29x80/132 plus	29x80/132 plus	24x80 plus status	24x80	24x80
	status line	status line	line	40.44	
Screen area (diagonal), inches Tilt/swivel screen	14 Std.	14 Std.	12 std.; 14 opt. Std.	12; 14 opt. Std.	14 Std.
Total displayable symbols	256 ASCII	256 ASCII	128 ASCII + 64 grph.	128 ASCII	128 ASCII
Symbol formation	5/8x10 in 6/10x10	5/8x10 in 6/10x10	7x9 dot matrix	7x9 dot matrix	7x11 dot matrix
Character phosphor	P31 green std.;	Color (P21) RGB	P4 white std., P31	P4 white std.; P31	P31 green
Color capability	amber opt. No	Std. (4 from 64)	green opt. No	green opt. No	No
Graphics	Std.	Std. (4 Holli 04)	64 graphics char.	No	No
Programmable field/char. highlighting via:					
Underline	Std.	Std.	Std.	Std.	Std.
Blink Blank	Std. Std.	Std. Std.	Std. Std.	Std. Std.	Std.
Bold	Std.	Std.	Std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	Std.	Std.	No	No	No Smit soresm
Scroll Paging	Up/down, smooth No	Up/down, smooth No	Up/down, smooth 1 std.; 8 opt.	Up/down, smooth No	Split screen 6 pages std.
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Std.	Std.	Both std.	Std.	
Protected format	No Std.	No	Std.	Std. Std.	Std. Std.
Partial screen transmit Split screen/windows	No	Std. No	Std. Std.	Std.	No
Tabulation	Fwd./back std.	Fwd./back std.	Fwd./back std.	Std.	Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete Erase	Std. Char./line/screen	Std. Char./line/screen	Std. Std.	Std. Std.	Std. No
Lidse	std.	std.	Siu.	Siu.	INO
KEYBOARD PARAMETERS					
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	256 ASCII	256 ASCII	128 ASCII	128 ASCII	128 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	15/30 std.	15/30 std.	12 std.	12 std.	8 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
ANCILLARY DEVICES	Stu.	Siu.	Sid.	Siu.	Joiu.
Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed	No	No	No	No	No
Composite video Port for cust supplied devices	Std. Std.	Std. Std.	No Opt.	No Opt.	No Std.
Other vendor-supplied devices			—	—	
RANSMISSION PARAMETERS					
Mode Taghaigus	Full-duplex	Full-duplex Asynchronous	Half/full-duplex	Half/full-duplex	Half-duplex
Technique Communications protocol	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII	Async./sync.
Code	ASCII	ASCII	ASCII	ASCII	ASCII
Speed, bits/second	50-19,200	50-19,200	50-19,200	50-19,200	50-19,200
Format Multipoint operation	Character No	Character No	Char./line/block	Char./line/block	Character Pollable
Terminal interface	RS-232-C std.; 20mA	RS-232-C std.; 20mA	RS-232-C std.; 20mA	RS-232-C std.;	RS-232-C, TDI
	opt.	opt.	opt.	20mA opt.	
Integral modem	No	No	No	No	No
Integral acoustic coupler PRICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	1,695	2,195	995	995	1,695
Controller, purchase	<u> </u>	<u> </u>	l		
Monthly prime-shift maintenance			_		_
Annual prime-shift maintenance Date of announcement	11/84	11/84	9/81	9/81	5/83
Date of first production delivery	5/85	5/85	9/81	9/81	6/83
Display units installed to date Serviced by			Visual Technology	 Visual Technology	Visual Technology
COLVICED BY	visual reciliology	visual recimology	visual reciliology	visual reciliology	visuai reciliology
	DEC special	DEC special	Block graphics & 16	Emulations include:	Compatible with
COMMENTS	graphics; five	graphics, five	line drawing char-	DEC VT52, Lear	Burroughs poll/
COMMENTS			acter set std.;	Siegler ADM 3A,	select protocol
COMMENTS	character sets;	character sets;			•
COMMENTS	character sets; Tektronix 4010/4014	Tektronix 4010/4014	menu-style setup	Data General Dasher	
COMMENTS	character sets;			Data General Dasher D200, Hazeltine (Esprit) 1500; line	
OMMENTS	character sets; Tektronix 4010/4014 and DEC ReGIS	Tektronix 4010/4014 and DEC ReGIS		Data General Dasher D200, Hazeltine (Esprit) 1500; line drawing graphics	·
OMMENTS	character sets; Tektronix 4010/4014 and DEC ReGIS	Tektronix 4010/4014 and DEC ReGIS		Data General Dasher D200, Hazeltine (Esprit) 1500; line	·

VENDOR AND MODEL	Visual 500	Visual 550	Volker-Craig VC4604 & VC4604/GX	Volker-Craig VC5000 & VC5000/GX	Volker-Craig VC5220
ERMINAL DESCRIPTION				İ	
Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller Fransportability	No	No	No	No	No
BM compatibility	No	No	No	No	No
Teletype compatibility	Std.	Std.	Std.	Std.	Std.
Other compatibility	See comments	See comments	Lear Siegler ADM 3A & VC4404	See comments	Digital VT220, VT100, VT131, VT5
SPLAY PARAMETERS					
Display capacity, no. of char. Memory capacity, no. char./lines/pages	2640 1 page	2640 1 page	1920 1920 char.	2000 8 pages	1920, 3168 1 page std.
Screen arrangement, lines x char./line	33x80 plus status	33x80 plus status	24x80	25x80	24x80/132
Screen area (diagonal), inches	line 14	line 14	12	12	14
Filt/swivel screen	Std.	Std.	No	Std.	Std.
Total displayable symbols	128 ASCII	128 ASCII	128 ASCII	512 ASCII	256
Symbol formation Character phosphor	10x17 dot matrix P39 green	10x17 dot matrix P39 green	7x9 dot matrix P31 green or amber	7x9 in 9x10 cell P31 green or amber	7x10 dot matrix P31 green or amber
• •			1	1	To r green or amber
Color capability Graphics	No Std.	No Std.	No Std. (VC4604/GX)	No Std. (VC5000/GX)	No Business graphics
Programmable field/char, highlighting via:	Sid.	Sia.	Sta. (VC4004/GA)	Sia. (VC5000/GA)	business graphics
Underline '	Std.	Std.	No	Std.	Std.
Blink Blank	Std. Std.	Std. Std.	No No	Std. Std.	Std.
Bold	Std.	Std.	Dim	Dim	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size Scroll	No Std.	No Std.	No Up std.	No Up/down, smooth	Std. Jump & smooth std
Paging	No	No	No sid.	2 std.; 8 opt.	1 std.
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor Protected format	Both std. Std.	Both std. Std.	Addressable only No	Std. Std.	Both std.
Partial screen transmit	Std.	Std.	No	Std.	Std.
Split screen/windows	Std.	Std.	No	Std.	2 std.
Fabulation	Fwd./back std. Std.	Fwd./back std. Std.	No ·	Std.	Std.
Character insert/delete Line insert/delete	Std.	Std.	No	Std.	Std.
rase	Char./line/screen	Char./line/screen	Line/screen std.	Line/screen std.	Line/screen std.
EYBOARD PARAMETERS	std.	std.			
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Sharrastan/anda ant	100 4000	100 4000	100 4000	542 ACCII	100 4000
Character/code set Detachability	128 ASCII Std.	128 ASCII Std.	128 ASCII Std.	512 ASCII Std.	128 ASCII Std.
Program function keys	12 std.	12 std.	10 std.	16/32 std.	15/30 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES	Sia.	310.	Siu.	Sid.	Jaiu.
Serial printer, type, and speed	No	No	No	No	No
ine printer, type, and speed Composite video	No No	No No	No Opt.	No Opt.	No No
Port for custsupplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices	-	-	-	_	_
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Fechnique Communications protocol	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII
Code	ASCII	ASCII	ASCII	ASCII	ASCII
Speed, bits/second	50-19,200 Chan (line (blook	50-19,200	50-19,200 Character	50-19,200 Char /blook	75-19,200
Format Multipoint operation	Char./line/block	Char./line/block	Character No	Char./block No	Char./line/block No
Terminal interface	RS-232-C or 20mA	RS-232-C or 20mA	RS-232-C std.;	RS-232-C std.;	RS-232-C
ntegral modem	No	No	20mA opt. No	20mA opt. No	No
ntegral acoustic coupler	No	No	No	No	No
RICIÑG AND AVAILÁBILITY Display station, purchase	1,595	1,595	495/945 (GX)	695/1,145 (GX)	795
Controller, purchase					
Monthly prime-shift maintenance					
Annual prime-shift maintenance Date of announcement	8/82	4/82	5/83	5/83	10/85
Date of announcement Date of first production delivery	9/82	5/82	4/84	2/85	12/85
Display units installed to date	-	1	I—	<u> </u>	-
Serviced by	Visual Technology	Visual Technology	Third party	Third party	Honeywell, third party
OMMENTS	Emulations include:	Alphanumeric code	VC4604/GX features:	Emulates VC4604,	Purty
	Hazeltine 1500, Data	compatible to DEC	Tektronix 4010	VC4152, & VC414H,	
	General Dasher 200, Lear Siegler ADM-3A,	VT100 and ANSI X3.64. in alpha	graphics format; 512x250 resolution;	ADDS Viewpoint, DEC VT52, Esprit	
	DEC VT52, Tektronix	mode; code compat-	auto, scaling from	Systems Esprit,	
	4010, 4014 (in	ible with Tektronix	1024x780 resolution	Hazeltine 1500,	
	graphics mode);	4014, 4014 in graph-	for Tektronix Plot	Lear Siegler ADM	
	graphics mode); code compatible w/ raster size of 768x	ics mode, with raster size of 768x	10 & Gino-F compatibility; National	3A/5 & ADM 11, TeleVideo 925 &	

VENDOR AND MODEL	Wang 2110	Wang 4205	Wang 4210	Wang 4220	Wang 4230
ERMINAL DESCRIPTION					
Standalone or cluster Maximum displays/controller	Standalone	Standalone	Standalone	Standalone	Standalone
Transportability	No	No	No	No	No
IBM compatibility	No	No	No	No	No
Teletype compatibility	No	No	No	No	No
Other compatibility	ANSI X3.64	_	_	_	_
ISPLAY PARAMETERS					
Display capacity, no. of char. Memory capacity, no. char./lines/pages	2000	2000	2000	2000	2000
Screen arrangement, lines x char./line	25x80	25x80	25x80	25x80	25x80
Screen area (diagonal), inches	12	12	12	12	12
Tilt/swivel screen	Std.	Std.	Std.	Std.	Std.
Total displayable symbols	256	256	256	256	256
Symbol formation	9x12 cell	8x10 dot matrix	8x10 dot matrix	8x10 dot matrix	8x10 dot matrix
Character phosphor	P31 green std.	P42 green std.	P42 green std.	P42 green std.	P42 green std.
Color capability	No	No	No	No	No
Graphics Programmable field (char highlighting via:	No	No	Std.	No	No
Programmable field/char. highlighting via: Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold	Std.	Std.	Std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size Scroll	No Up/down std.	No Up/down std.	No Up/down std.	No Up/down std.	No Up/down std.
Paging	No	No	No	No	No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Both std.	Both std.	Both std.	Both std.	Both std.
Protected format	Std.	Std.	Std.	Std.	Std.
Partial screen transmit Split screen/windows	Std. No	Std. No	Std. No	Std. No	Std. No
Tabulation	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Std.	Std.	Std.	Std.	Std.
CEYBOARD PARAMETERS					
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	128 ASCII	128 ASCII	128 ASCII	128 ASCII	128 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	16 std.	16 std.	16 std.	16 std.	16 std.
Numeric keypad	Std.	Std.	Std.	Std.	Std.
ANCILLARY DEVICES		Jiu.		J.	
Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed	No	No	No	30 cps-300 lpm	No
Composite video Port for custsupplied devices	No No	No No	No Std.	No No	No No
Other vendor-supplied devices	—	Monitor arm	Monitor arm	Monitor arm	Monitor arm
RANSMISSION PARAMETERS					
Mode	Half/full-duplex	Full-duplex	Full-duplex	Full-duplex	Full-duplex
Technique Communications protocol	Asynchronous Wang private/ANSI	Synchronous Wang private	Synchronous Wang private	Asynchronous Wang private	Asynchronous Wang private
Code	WISCII/ASCII	WISCII	WISCII	WISČII	WISCII
Speed, bits/second	Up to 19,200	4M	4M	Up to 9600	4M
Format	Character	Block	Block	Block	Block
Multipoint operation Terminal interface	No RS-232-C	No Wang 928	No Wang 928	Std. RS-232-C	No Wang 928
Tomiliai interiace	110-232-6	Wally 320	vvally 320		
Integral modem	No	No	No	No	No
Integral acoustic coupler PRICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	895	2,000	3,100	2,000	2,750
Controller, purchase	l—		 	 	
Monthly prime-shift maintenance	9	20	20	18	20
Annual prime-shift maintenance	108	240	240	216	240
Date of announcement Date of first production delivery	4/85 6/85	2/83 3/84	8/83 8/83	8/83 12/83	11/83 3/84
Display units installed to date			- J		1
Serviced by	Wang Laboratories	Wang Laboratories	Wang Laboratories	Wang Laboratories	Wang Laboratorie
COMMENTS					
OIVIIVIEN 13					
	i e	1	i i	i	1
	i	1			

VENDOR AND MODEL	Wang 4245	Westinghouse Canada Model 1625	Westinghouse Canada Model W1640	Westinghouse Canada Model W1640 VIP Dual	Westinghouse Canada Model W1642
TERMINAL DESCRIPTION					
Standalone or cluster	Standalone	Either	Either	Either; sw. select.	Either
Maximum displays/controller	1	48	48	322	48
Transportability	No	No	No	No	No
IBM compatibility Teletype compatibility	No	IPARS	No	No	IPARS
Other compatibility	No	Opt. Honey. VIP7700, Uni-	No Honey, VIP7700, Uni-	No Honey. 7700/7800	Opt. Univac UTS 20, Uni-
Carlor compatibility		scope 100/200 opt.	scope 100/200 opt.	11101ley. 7700/7000	scope 100
DISPLAY PARAMETERS		1			
Display capacity, no. of char.	2000	1920	1920; 2000 opt.	1920, 2000	2000
Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line	25x80	80/24/1;3/5 pp. opt. 24x80	80/25/1; multi opt. 24x80 plus	1920/24/1;3 24x80 plus status	80/25/1; multi-opt. 24x80 plus
octeen arrangement, intes x char./inte	25,60	24,80	status line	line	status line
Screen area (diagonal), inches	12	12	12	12	12
Tilt/swivel screen	Std.	Opt.	Opt.	Opt.	Opt.
Total displayable symbols	256	126 ASCII; 254 opt.	94 ASCII + opt.	94 + 11 graphics	94 ASCII + opt.
Symbol formation Character phosphor	8x10 dot matrix	5x7 dot matrix P31 green std.	5x7/7x9 dot matrix P31 green std.	5x7 dot matrix P31 green std.	5x7/7x9 dot matrix P31 green std.
• •	COIOI	i o i giccii sta.	To r green sta.	To r green sta.	To r groom sta.
Color capability	8 colors std.	No	No	No	No
Graphics Programmable field (char highlighting via:	Std.			11 graphics char.	Opt.
Programmable field/char. highlighting via: Underline	Std.	Field std.	Field std.	Std.	Field std.
Blink	Std.	Field std.	Field std.	Std.	Field std.
Blank	Std.	Field opt.	Field std.	Std.	Field std.
Bold	Std.	Std.	Std.	No	Std.
Reverse	Std.	Field opt.	Opt.	No; std. (7800)	Field opt.
Double size Scroll	No Up/down std.	No Up/down std.	No Opt.	No; up/down std.	No Opt
Paging	No	1st; 3/5 opt.	Opt.	No; up/aown sta.	Opt.
Selectable cursor blinking	Std.	No	Opt.	No	Opt.
Addressable/readable cursor	Both std.	Both std.	Add. std.; Read opt.	Both std.	Add. std.; Read opt
Protected format	Std.	Std.	Std.	Std.	Opt.
Partial screen transmit Split screen/windows	Std.	Std.	Std. 2 opt.	Std. No	Std.
Tabulation	No Fwd./back std.	2 opt. Fwd./back std.	Fwd./back std.	Fwd./back tab std.	Opt. Fwd./back std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Std.	Char./line/screen	Char./line/screen	Char./line/screen	Char./line/screen
EYBOARD PARAMETERS		std.	std.	std.	std.
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	128 ASCII	126 ASCII	94 ASCII	128 ASCII	94 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	16 std.	7 std.; up to 19	7 std.; up to 19	6 std.; 17 std.	Up to 32 user-de-
·		opt.	opt.	(7800)	fined
Numeric keypad	Std.	Std.	Std.	Std.	Opt.
ANCILLARY DEVICES Serial printer, type, and speed	No	30-60 cps impact	30-60 cps impact	No	30-60 cps impact
Line printer, type, and speed	No	No	No	No	No
Composite video	No	Opt.	No	No	No
Port for custsupplied devices	No	Std.; Aux opt.	Std.	RS-232-C std.	Std.
Other vendor-supplied devices	Monitor arm	I—		Opt. cluster con-	Credit card reader,
				troller, W1654	embedded numeric
					functions
RANSMISSION PARAMETERS	1			1	
Mode	Full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half std.; full opt.
Technique Communications protocol	Synchronous	Async./sync.	Synchronous Honev., Univac opt.	Synchronous	Async./sync.
Communications protocol Code	Wang private WISCII	Various opt. ASCII	ASCII	Honeywell VIP	Various opt. ASCII
Speed, bits/second	4M	50-9600	Up to 9600	Up to 9600	Up to 9600
Format	Block	Blk.std.;char./ln.	Block	Block/line (7800)	Block
Multipoint operation	No	Std.	Std.	Std.	Std.
Terminal interface	Wang 928	RS-232-C std.; 20mA,	RS-232-C std.; party	RS-232-C std.; 5-	Party line; RS-232-0
Integral modem	No	party line opt.	line opt.	cond. party line No	opt. No
Integral modern	No No	No No	No No	No	No No
RICING AND AVAILABILITY	1	1	1	1	Ī
Display station, purchase	3,550-3,700	2,600	2,800	3,065 (U.S.)	2,400
Controller, purchase	I _	650	1,565	1,500 (U.S.)	425
Monthly prime-shift maintenance	28	Contact vendor	Contact vendor		Contact vendor
Annual prime-shift maintenance Date of announcement	276 (first year) 6/84	6/76	2/80		5/80
Date of first production delivery	6/85	11/76	1/81	2/83	3/81
Display units installed to date		Over 8000	Over 1800	I	Over 2300
Serviced by	Wang Laboratories	WCI, third party	WCI, third party	WCI, third party	WCI, third party
COMMENTS		A hoos desire CDT	A boss desire CDT	In alwater ender	A hose desi 007
COMMENTS	1	A base design CRT which can be sup-	A base design CRT which can be sup-	In cluster opera- tion, from 1 to 7	A base design CRT which can be sup-
		plied with customer	plied with customer	printers may be	plied with customer
		firmware & I/O con-	firmware & I/O con-	shared by terminals	firmware & I/O con-
		figured to meet	figured to meet	for local printing	figured to meet
		specific customer	specific customer	without communica-	specific customer
	1	requirements	requirements	tion to the host	requirements
	1	I	J	1	1

VENDOR AND MODEL	Canada Model W1643	Wyse WY-30	Wyse WY-50	Wyse WY-50+	Wyse WY-75
ERMINAL DESCRIPTION		 			
Standalone or cluster	Either	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller	48	_	l—		<u> </u>
Transportability	No	No	No	No	No
IBM compatibility	SDLC	No	No	3101	No
Teletype compatibility	Opt.	Std.	Std.	Std.	Std.
Other compatibility	Honeywell VIP 7700,	See comments	See comments	See comments	DEC VT100, ANSI
ISPLAY PARAMETERS	Uniscope 100		1		X3.64
Display capacity, no. of char.	2000	2080	2080, 3432	2080, 3432	2080, 3432
Memory capacity, no. char./lines/pages	80/25/1	1 page std.	1 page std.	1 page std.	1 page std.
Screen arrangement, lines x char./line	25×80	24x80 plus status	24x80/132 plus	24x80/132 plus	24x80/132 plus
,		& label lines	status/label lines	status/label lines	status/label lines
Screen area (diagonal), inches	12	14	14	14	14
Tilt/swivel screen	Opt.	Tilt std.	Std.	Std.	Std.
Total displayable symbols	512	128 ASCII	128 ASCII	128 ASCII	128 ASCII
Symbol formation	5x7 dot matrix	7x11 in 10x12 cell	7x13 in 10x13 cell	7x13 in 10x13 cell	7x13 in 10x13 cell
Character phosphor	P31 green std.	P31 green	P31 green	Amber	P31 green
Color capability	No	No	No	No	No
Graphics		Line drawing	Line drawing	Line drawing	Line drawing
Programmable field/char. highlighting via:					
Underline	Std.	Std.	Std.	Std.	Std.
Blink	Std.	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold	Std.	Std.	Std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	No	Std.	No	No	No
Scroll Paging	Opt.	Std.	Std.	Std. Std.	Std. Std.
raging Selectable cursor blinking	Opt. Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Add. std.; Read opt.	Both std.	Both std.	Both std.	Both std.
Protected format	Opt.	Std.	Std.	Std.	Std.
Partial screen transmit	Std.	Std.	Std.	Std.	Std.
Split screen/windows	Opt.	Std.	Std.	Std.	Std.
Tabulation	Fwd./back std.	Std.	Std.	Std.	Std.
Character insert/delete	Std.	Std.	Std.	Std.	Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Char./line/screen	Line/page/field	Line/page/field	Line/page/field	Char./line/page/
EYBOARD PARAMETERS	std.	std.	std.	std.	field std.
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
0.1,10	Typewnie	Typewitter	1 7 7 5 7 7 1 1 1	Typewnien	Typewiter
Character/code set	94 ASCII	ASCII	ASCII	ASCII	ASCII
Detachability	Opt.	Std.	Std.	Std.	Std.
Program function keys	24	4/16 dedicated,	16/32 dedicated	16/32 dedicated	16/32 dedicated
		25 additional		١	
Numeric keypad	Std.	Std.	Std.	Std.	Std.
NCILLARY DEVICES	30 60 and impact	No	No	No	No
Serial printer, type, and speed Line printer, type, and speed	30-60 cps impact	No	No	No No	No
Composite video	No	No	No	No	No
Port for custsupplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices	Card reader	_			
RANSMISSION PARAMETERS	Light (full) durates	Holf (full dumlar)	Holf (full dumles)	Holf (full dumles)	Molf/full dismissi
Mode Technique	Half/full-duplex	Half/full-duplex	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous
Communications protocol	Synchronous SDLC	Asynchronous ASCII	ASCII	ASCII	ASCII/ANSI
Code	EBCDIC	ASCII	ASCII	ASCII	ASCII/ANSI
Speed, bits/second	Up to 19,200	50-38,400	50-38,400	50-38,400	50-38,400
Format	Block	Char./block	Char./block	Char./block	Char./block
Multipoint operation	Std.	No	No	No	No
Terminal interface	RS-232-C or party	RS-232-C	RS-232-C	RS-232-C	RS-232-C
Later and an extensi	line	1		1	1
Integral modem	No	No	No	No	No
Integral acoustic coupler RICING AND AVAILABILITY	No	No	No	No	No
Display station, purchase	Contact vendor	399	599	699	795
Controller, purchase	Vendor		_		1
Monthly prime-shift maintenance		_	_		I
Annual prime-shift maintenance					
Date of announcement	9/83	8/85	9/83	8/85	2/84
Date of first production delivery	3/84	8/85	11/83	8/85	2/84
Display units installed to date		<u> -</u>	Over 500,000		<u> </u>
Serviced by	WCI, third party	Wyse Technology,	Wyse Technology,	Wyse Technology,	Wyse Technology,
ON AN AFRITO		authorized dist.	authorized dist.	authorized dist.	authorized dist.
OMMENTS	Can be supplied	Emulations include:	Emulations include:	Emulations include:	1
	with customer	Wyse WY-50, ADDS	ADDS Viewpoint,	Wyse WY-50, ADDS	
	firmware and I/O	Viewpoint, Lear	Lear Siegler ADM 3A/5, ADM 31,	Viewpoint, Lear	1
	configured to meet specific customer	Siegler ADM 3A/5, ADM 31, TeleVideo	TeleVideo 910, 920,	Siegler ADM 3A/5, ADM 31, TeleVideo	1
	requirements	925; tilt/swivel or	925, Hazeltine 1500	910, 920, 925, 950,	1
	requirements	adjustable arm opt.	525, Hazenine 1500	Hazeltine 1500,	
	1	dajustable arm opt.			1
		adjustable ann opt.		Data General D200, IBM 3101	

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VENDOR AND MODEL	Wyse WY-85	Wyse WY-350	Zenith Z-22	Zenith Z-29A	Zenith Z-49
TERMINAL DESCRIPTION Standalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
Maximum displays/controller	-		-		
Transportability IBM compatibility	No No	No No	No No	No No	No No
Teletype compatibility	Std.	Std.	Std.	Std.	Std.
Other compatibility	DEC VT220, VT100, ANSI X3.64	See comments	LSI ADM 3A/5/11, TeleVideo 914	DEC VT100/VT52, LSI ADM 3A, Hazeltine	DEC VT100/VT52, Zenith Z-19, Z-29
DISPLAY PARAMETERS		0000 0400	1000		2000
Display capacity, no. of char. Memory capacity, no. char./lines/pages	2080, 3432 1 page std.	2080, 3432 1 page std.	1920 1 page	2000	2000 1 page
Screen arrangement, lines x char./line	24x80/132 plus	24x80/132 plus	24x80 plus status	24x80 plus	25x80
Screen area (diagonal), inches	status/label lines	status/label lines	line 12	user line 14	14
Tilt/swivel screen	Std.	Std.	Std.	Std.	Std.
Total displayable symbols Symbol formation	256 ASCII 7x9 in 10x10 cell	128 ASCII 7x13 in 10x13 cell	128 ASCII 5x9 dot matrix	128 (91 ASCII + 33h) 5x7 dot matrix	128 ASCII 10x12 dot matrix
Character phosphor	P31 green or amber	Color	P31 green	Amber	P31 green or ambe
Color conshility	\	64 salara available	NI-	N.	N-
Color capability Graphics	No Graphics soft, font	64 colors available Line drawing	No Business graphics	No Business graphics	No Business graphics
Programmable field/char. highlighting via:	1				
Underline Blink	Std.	Std. Std.	Std. Std.	Std. Std.	Std. Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold Reverse	Std. Std.	Std.	Std. STd.	Std. Std.	Std. Std.
Double size	Std.	Std.	No	No	Std.
Scroll Paging	Std. Std.	Std. Std.	Up std. No	Std.	Up std., smth./jum No
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor Protected format	Both std.	Both std.	Both std.	Both std.	Both std.
Partial screen transmit	Std. Std.	Std.	Std. Std.	Std. No	No No
Split screen/windows	Std.	Std.	No	No	No
Tabulation Character insert/delete	Std. Std.	Std.	Fwd./back std. Std.	Std. Std.	Fwd./back std. Std.
Line insert/delete	Std.	Std.	Std.	Std.	Std.
Erase	Char./line/page/	Line/page/field std.	Char./line/screen	Std.	Char./line/screen std.
KEYBOARD PARAMETERS					, ,
Style	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
Character/code set	ASCII	ASCII	64 ASCII	ASCII	64 ASCII
Detachability	Std.	Std. 16/32 dedicated	Std. 10 std.	Std. 9 std.	Std. 9 std.
Program function keys	20 dedicated	10/32 dedicated	TO Std.	5 std.	5 stu.
Numeric keypad ANCILLARY DEVICES	Std.	Std.	Std.	Std.	Std.
Serial printer, type, and speed	No	No	No	No	No
Line printer, type, and speed	No	No	No	No	No
Composite video Port for custsupplied devices	No Std.	No Std.	No Std.	No No	No Std.
Other vendor-supplied devices					
TRANSMISSION PARAMETERS				11.15/5 # 1 . 1	
Mode Technique	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous	Half/full-duplex Asynchronous
Communications protocol	ANSI	ASCII	ASCII	DC1-DC3	ASCII/ANSI
Code Speed, bits/second	ASCII 50-38,400	ASCII 50-38,400	ASCII 300-19,200	ASCII 75-19,200	ASCII 50-19,200
Format	Char./block	Char./block	Char./line/block	Char./block	Character
Multipoint operation Terminal interface	No RS-232-C, RS-423,	No RS-232-C	No RS-232-C	No RS-232-C	No RS-232-C
	or 20mA		1		!
Integral modem Integral acoustic coupler	No No	No No	No No	No No	No No
PRICING AND AVAILABILITY				Ì	
Display station, purchase	799	1,295	356	799	1,099
Controller, purchase Monthly prime-shift maintenance	_	_			
Annual prime-shift maintenance	 —		11/04		
Date of announcement Date of first production delivery	12/84 2/85	12/84 2/85	11/84 12/84	1/83	6/84 8/84
Display units installed to date			⁻		
Serviced by	Wyse Technology, authorized dist.	Wyse Technology, authorized dist.	Zenith	Zenith Data Systems	Zenith
COMMENTS	Latinonicou dist.	Emulations include:	Auto logon permits	-,5.55	Emulates DEC VT5
		Wyse WY-50, ADDS Viewpoint, Lear	programming of up to 10 different		VT100, & VT102, Zenith Z-19 & Z-29
		Siegler ADM 3A/5,	passwords or phone	1	ANSI X3.64
		ADM 31, TeleVideo	numbers		
		910,920, 925, Hazel- tine 1500			
					1

VENDOR AND MODEL	Zentec Zephyr 100	Zentec Zephyr 220	Zentec 1051/2	Zentec 1055	Zentec 1060
RMINAL DESCRIPTION					
tandalone or cluster	Standalone	Standalone	Standalone	Standalone	Standalone
laximum displays/controller		No.	Al-	No.	N-
ransportability BM compatibility	No No	No No	No No	No No	No No
eletype compatibility	No	Std.	Std.	Std.	Std.
ther compatibility	DEC VT100	DEC VT220	DEC VT132, ANSI	DEC VT220	DEC VT220
			X3.64		Į.
SPLAY PARAMETERS	0000 0000		2000 2000	2000 2000	2000 0000
isplay capacity, no. of char. lemory capacity, no. char./lines/pages	2000, 3300 1 page	2000, 3300 1 page	2000, 3300 4 pages	2000, 3300	2000, 3300
creen arrangement, lines x char./line	1 page 25x80/132	25x80/132	25x80/132	25x80/132	25x80/132
order arrangement, mas x onar., me	20,00,102	20,007,102	20,007,102	20,00,102	20000, 102
creen area (diagonal), inches	14	14	12 or 15	14	14
ilt/swivel screen	Std.	Std.	Std.	Std.	Std.
otal displayable symbols	220	220	128 ASCII	128 ASCII	128 ASCII
ymbol formation haracter phosphor	P134 amber std.;	P134 amber std.; P4	9x12 dot matrix P134 amber std.;	P134 amber or P128	P134 amber or P13
naracter priosprior	P31 green opt.	wht., P31 grn. opt.	white, green opt.	green	areen
olor capability	No	No	No	No	No
raphics	No	No	256 graphics char.	No	No
rogrammable field/char. highlighting via:	l <u>.</u> .	L .			l
Underline	Std.	Std.	Std.	Std.	Std.
Blink Blank	Std.	Std.	Std. Std.	Std. Std.	Std.
Bold	Std. Std.	Std. Std.	Std.	Std.	Std.
Reverse	Std.	Std.	Std.	Std.	Std.
Double size	Std.	Std.	Std.	Std.	Std.
croll	Smooth	Smooth	Smooth std.	Smooth	Smooth
aging	No	No	4 std.	2 plus opt.	2 plus opt.
electable cursor blinking	Std.	Std.	Std.	Std.	Std.
ddressable/readable cursor	Std.	Std.	Std.	Std.	Std.
artial screen transmit	Std. Std.	Std. Std.	Std. Std.	Std.	Std. Std.
plit screen/windows	Std.	Std.	Std.	Std.	Std.
abulation	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.	Fwd./back std.
haracter insert/delete	Std.	Std.	Std.	Std.	Std.
ine insert/delete	Std.	Std.	Std.	Std.	Std.
rase	Std.	Std.	Std.	Std.	Std.
VROARD BARAMETERS			1		
YBOARD PARAMETERS tyle	Typewriter	Typewriter	Typewriter	Typewriter	Typewriter
tyle	Typewriter	Typewriter	Typewriter	Typewine	i ypewiitei
haracter/code set	ASCII	ASCII	ASCII	ASCII	ASCII
etachability	Std.	Std.	Std.	Std.	Std.
rogram function keys	12; 8 programmable	15 std.	16 std.	21 std.	21 std.
home and a first control of	0.4	Cod	lo. 4	Cont	C+4
lumeric keypad ICILLARY DEVICES	Std.	Std.	Std.	Std.	Std.
erial printer, type, and speed	No	No	No	No	No
ine printer, type, and speed	No	No	No	No	No
omposite video	No	No	No	No	No
ort for custsupplied devices	Std.	Std.	Std.	Std.	Std.
ther vendor-supplied devices		_	_	_	-
ANSMISSION PARAMETERS	E. H. down!	F. W. down!	11-16/6.41	Full don't	Full district
lode	Full-duplex	Full-duplex	Half/full-duplex	Full-duplex	Full-duplex
echnique ommunications protocol	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII	Asynchronous ASCII
ode	ASCII	ASCII	ASCII	ASCII	ASCII
peed, bits/second	75-19,200	75-19,200	Up to 19,200	75-19,200	75-38,400
ormat	Character	Character	Char/line/block	Character	Character
fultipoint operation	No	No	Std.	No	No
erminal interface	RS-232-C, RS-423,	RS-232-C, RS-423,	RS-232-C or RS-422	RS-232-C	RS-232-C
storral modern	or 20mA	or 20mA	No	No	No
ntegral modem ntegral acoustic coupler	No No	No No	No No	No No	No No
ICING AND AVAILABILITY	1110	110	""	1.10	1.10
isplay station, purchase	650	850	1,295	850	950
ontroller, purchase		_		_	_
onthly prime-shift maintenance	_		Contact vendor		
nnual prime-shift maintenance	4.05	14.04	-	1.05	F. (05
ate of announcement	4/85	11/84	6/83	1/85	5/85
ate of first production delivery isplay units installed to date	5/85	12/84	1/84	3/85	6/85
erviced by	Third party	Third party	Zentec	Zentec	Zentec
		,			
MMENTS		DEC special graph-	RAM expandable to	Custom features	Offers 390 scan
		ics; multi-national	64K (32K standard);	are factory quoted	line display for
		character set &	soft set-up; 256		high resolution;
		downloadable char-	graphics characters		custom features ar
	1	acter set; soft set-up; optional	1		factory quoted
			i contract of the contract of	i .	1
		foreign keyboards			

	1	1		
VENDOR AND MODEL	Zentec WS-1000	Zilog VTZ 3/20		
TERMINAL DESCRIPTION Standalone or cluster	Standalone	Standalone		
Maximum displays/controller	 			
Transportability IBM compatibility	No No	No No		
Teletype compatibility	Std.	No		
Other compatibility	DEC VT220	DEC VT132		
DISPLAY PARAMETERS				
Display capacity, no. of char.	2000	2000, 3300		
Memory capacity, no. char./lines/pages Screen arrangement, lines x char./line	1 page 25x80	4 pages 25x80/132		
	1	, ·		
Screen area (diagonal), inches Tilt/swivel screen	14 Std.	13 Tilt std.		
Total displayable symbols	128 ASCII	128 w/line graphics		
Symbol formation		5x12 or 11x12 cell		
Character phosphor	P134 amber std.; P4 wht., P31 grn. opt.	P1 green or P134 amber		
Color capability	No	No		
Graphics Programmable field/char, highlighting via:	No	Std. (VT132)		
Underline '	Std.	Std.		
Blink	Std.	Std.		
Blank Bold	Std.	Std.		
Reverse	Std.	Std.		
Double size Scroll	No No	Std.		
Paging	No	4 std.		
Selectable cursor blinking Addressable/readable cursor	Std.	Std.		
Protected format	Std.	Std.		
Partial screen transmit	Std.	Std.		
Split screen/windows Tabulation	Std. Fwd./back std.	No Fwd./back std.		
Character insert/delete	Std.	Std.		
Line insert/delete	Std.	Std.		
Erase	Std.	Std.		
KEYBOARD PARAMETERS				
Style	Typewriter	Typewriter		
Character/code set	ASCII	64 ASCII		
Detachability Program function keys	Std. 15 std.	Std. 16 std. (+ 16		
Program function keys	15 Std.	shifted)		
Numeric keypad	Std.	Std.		
ANCILLARY DEVICES Serial printer, type, and speed	No	No		
Line printer, type, and speed	No	No		
Composite video Port for cust -supplied devices	No Std.	No No		
Other vendor-supplied devices				
TRANSMISSION PARAMETERS Mode	Full-duplex	Full-duplex		
Technique	Asynchronous	Asynchronous		
Communications protocol Code	ASCII ASCII	ASCII		
Speed, bits/second	75-19,200	Up to 19,200		
Format Multipoint operation	Character	Char./line/block		
Multipoint operation Terminal interface	No RS-232-C or RS-423	No RS-232-C		
	1			1
Integral modem Integral acoustic coupler	No No	No No		
PRICING AND AVAILABILITY				
Display station, purchase	Contact vendor	1,295		
Controller, purchase Monthly prime-shift maintenance				
Annual prime-shift maintenance	-			
Date of announcement Date of first production delivery	11/84	6/84		
Display units installed to date	12/84	6/84		
Serviced by		Zilog		
COMMENTS	Expandable, with	80/132-column		
	plug-in bus extend-	display; 25th line		
	er, to IBM PC &	for status & static		
	PC XT compatibility (separate work-	messages		
	station storage			
	unit available); soft set-up			
	Joshi Got-up			
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